These class notes and supplemental materials are written by an investor who audited Joel Greenblatt's Special Situation Class at Columbia's Graduate Business Program from 2002 through 2006. Different years may have an overlap of material and concepts covered by the prior year's notes but the repetition and supplemental material may improve retention. Any errors, omissions or faulty premises are the notetaker's fault and not implied or committed by the speakers or persons presented. Please use these notes as a spur to your own efforts and thinking in how to become a more effective investor. I hope this help. Comments welcome at aldridge56@aol.com

## Greenblatt Class \#1

Sept. 07, 2005

## A Story Selling Gum

My goal is to teach you the course that I never had and that I wish I had. I started in business school 25 years ago. What I know about investing other than reading financial statements, I learned on my own reading and making mistakes. Hopefully, I can give you the benefit of my experience.

A number of years ago I was trying to explain to my son what I did for a living. He is 11 years old. I spoke about selling gum. Jason, a boy in my son's class, sold gum each day at school. He would buy a pack of gum for 25 cents and he would sell sticks of gum for 25 cents each. He sells 4 packs a day, 5 days a week, 36 weeks or about $\$ 4,000$ a year. What if Jason offered to sell you half the business today? What would you pay?

My son replied, "Well, he may only sell three packs a day so he would make \$3000 a year. Would you pay $\$ 1,500$ now? Why would I do that if I have to wait several years for the $\$ 1,500$ ?

Would you pay a $\$ 1$ ? Yes, of course! But not $\$ 1,500$. I would pay $\$ 450$ now to collect $\$ 1,500$ over the next few years, which would be fair. Now, you understand what I do for a living, I told my son.

I sit around trying to figure out what businesses are worth, and then I try to pay a lot less for them. I think you get the point.

## The Skills I Will Teach You

I really don't think the skills that I am going to teach you are very valuable. It is not that you can't make a lot of money from what I am going to teach you. There are fundamentally better things you can do with your time. My view is that the social value of investing in the stock market as being similar to being good at handicapping horses. There is a benefit to having markets for raising capital; they just really don't need you.

I think what I am going to teach you this semester is really how to make money and so whatever social benefits there are to society, it is not very large. So if you do end up following my advice and it works for you, I would ask that you find some way to give back. I am one iteration removed so what I am doing?

I truly wish that I had the chance to have this course to help out in some way.

## Divergence between Prices and Values:

Prices fluctuate more than values-so therein lies opportunity.
Why are prices of each company so variable and volatile compared to the value of companies?
If I take out the newspaper and I pick out any large cap stock like IBM, Cisco, EBay, KKD, Google, why are the prices all over the place? Look at the wide divergence between the 52 week high/low. Here is a business that hasn't changed much but the price has gone from $\$ 35$ to $\$ 70$. $\$ 7$ to $\$ 30$ and right now to $\$ 20$. Look at ANF and INTL.

Questions:

These are all pretty good companies and this has been the least volatile period in many years, and there have been $100 \%$ moves over one to two year periods-why the huge disparity?

Are markets efficient?
Why do MBAs and other smart people not do well in money management?
People invest with their emotions. They process information differently.
Does it make sense that these prices fluctuate so much while the values of the underlying companies do not move around in a short period of time? (Price diverges from value).

Joel Greenblatt (JG): It is very clear—pick any company you want--the price is very volatile over short periods of time. It does not make sense to me that the values are nearly as volatile as the prices and therein lies what should be a great opportunity. All these companies which have fairly established businesses (Disney, Boeing, Wal-Mart) the values are not fluctuating nearly as widely as the prices. There should be great opportunity, yet there are not many winners in the market.

The reason why that is.......in the final analysis...... why do the price fluctuate so widely when values can't possibly? I will tell you the answer I have come up with: The answer is I don't know and I don't care. We could waste a lot of time about psychology but it always happens and it continues to happen.

I don't know and I don't care. I just want to take advantage of it. We could sit there and figure it all out, but I like to keep it simple. It happens; it continues to happen; the opportunities are there. I don't know why it happens and I don't care-I just want to take advantage of prices away from value.

In this course, I am going to teach you how to take advantage of that. I will make a guarantee now: If you do good valuation work and you are right, Mr. Market will pay you back. In the short term, one to two years, the market is inefficient. But in the long-term, the market has to get it right-it will pay you back in two to three years. Keep that in mind when you do your analysis. You don't have to look at the next quarter, the next six months, if you do good valuation work-and we will describe what that means-what the best metrics to use, Mr. Market will pay you. In the long-term Mr. Market eventually gets it right; he is very rational. That is very powerful. That is the context in which you should think this semester.

## The big picture:

There are lots of smart guys on Wall Street yet most of them go out and basically fail for many reasons-they are unable to contribute value. I have a firm, Gotham Capital; we have averaged $40 \%$ per year for 20 years. $\$ 1,000$ would now be $\$ 836,683$. There are lots of smarter people who can do better spread sheets than I can; there are lots of smarter analysts than me. I think the difference to how we have been able to do it is that we think simply and a little bit differently.

The context in which we put our analysis-not that our analysis is any better than anybody else's. We are not experts in any particular industry, we are not smarter than anybody else, and we are not doing better analysis. The fact that you are here means you can do the analysis. It is the context in which you put that analysis that makes the difference to you.

## Simplify, place valuation into context, practice.

That should be encouraging to you that you don't have to be smart, or have to do a million hours of work or tricky analysis, but you have to be good. You have to know what you know-Your Circle of Competence. You don't have to be the best in the world at figuring stuff out. It is the context which I will teach you those
simple things and then we will do a lot of practicing--practice of doing valuation while keeping the simple context in mind. Even I have to remind myself to remember what is important. You must be able to cut through all the noise. The Wall Street Journal has more info in it in one day than the entire world had 700 years ago.

## How to Beat the Market

Many people don't beat the market, so name some ways that you can do it.
Focus on small caps where the markets are more inefficient. There is less analyst coverage so less information flow. You have the chance to find prices more above or below value. Small caps have more opportunity to find mis-priced stocks.

Small Caps: Another secret, when money managers learn their valuation work and focus on small caps, they make a lot of money, and they graduate from small caps. For a guy starting out there is always an opportunity to do original work. There is turnover in the ranks.

Activist Investing: $J G$ won a proxy fight and eventually made money but it was not worth the pain. His first and last foray into activist investing.

Special situations: A corollary to small cap investing. You go where other people aren't. A more inefficient area of the market. Value investing with a catalyst.

Student: Superior knowledge in an industry. Linda Greenblatt focuses in retail.
Concentrate your investments.

## How Gotham generated great returns:

Gotham Capital stayed small. We returned outside capital, so we could invest in as many situations as possible (not constrained by size). We are very concentrated. We invest in 5 to 8 securities. Know your companies very well. Why that is more safe than diversifying? You pick your spots. So if your holding period is three to five years and you only have 4 to 6 securities, then you only need one or two ideas a year. That is why I have time to teach this class. It is more fun and it works.

## Why Value Investing Works

Richard Pzena:

| $1960-2005$ | S\&P 500 | Value Benchmark: Low P/E, Low P/Sales | Difference |
| :--- | :---: | :---: | :---: |
| Returns | $11 \%$ | $16.3 \%$ | 5.3 |
| $1995-2000$ |  |  |  |
| Returns | $163 \%$ | $71 \%$ | $-91 \%$ |

Note the LT outperformance of Value Metrics but the 5 year or more periods of underper-formance. Value Investing works because it doesn't work all the time

Value investing works, but it tends to work in cycles. Pzena lost $70 \%$ of his investors. Now of the $\$ 14$ billion he manages he only has 4 (Joel G. is one of them) of his original investors.

Joel G: I was down 5\% in 1998-1999 but worried about a bubble breaking in 1999 (a macro worry), but I could find cheap companies-look how cheap Brk.a got in 1999. They kept doing what they were doing. He was up $130 \%$ in 2000 . The markets came back.

Read: What Works on Wall Street by James P O’Shaughnessy. He started a fund in 1996-1997 but he underperformed the market by $25 \%$ and after three years in business of underperforming he sold his company at the bottom of the cycle. The guy who wrote the book quit his system! It seems like it is easy to do, but it is not easy to do.

This book, What Works on Wall Street, has born out its wisdom. The two funds that are patented that fool his strategy have been phenomenal. HFCGX is the patented fund based on his top idea of Cornerstone Growth; over the last 5 years it has had an average return of $13.44 \%$ per year vs. the Vanguard 500 's $-2.01 \%$ per year ( $6 / 1 / 00$ through $5 / 31 / 05$ ). HFCVX is the patented fund based on his 2nd to best idea of Cornerstone Value; over the last 5 years it has had an average return of $6.47 \%$ per year vs. the Vanguard 500 's $-2.01 \%$ per year (6/1/00 through 5/31/05).

The most interesting point is that the author points out those investors often are to emotionally involved to have the discipline to see the strategy through. Not only did the first reviewer bash the book because he did like the returns strategy one year after the book came out, but Mr. O'Shaughnessy sold the funds to Hennessy Funds at the end of $\mathbf{1 9 9 9}$ after it failed to surpass the returns of the bubble that soon after collapsed. Seven years after it was published an investor would be much wealthier had they followed the books top strategy instead of the investors who dog-piled onto the stocks of the market's bubble.

We are going to try to understand why it works. Why it has to work over time. That is the only way you can stick it out.

The math never changes: $2+2=4$. That is the level of your understanding I want you to have by the time we are done. If I get that right, forget all this other stuff and noise, I will get my money. No genius required.

## Concepts will make you great.

There is a lot of experience involved in valuation work, but it doesn't take a genius or high IQ points to know the basic concepts. The basic concepts are what will make you the money in the long run. We are all capable of doing the valuation work.

Overview of the course.
His book, How You Can Be a Stock Market Genius was written for the general public but he learned that it was written more at an MBA level.

Brian Gains was one of our analysts at Gotham. He will be one of the speakers in this class.
The Value Investor's Club:
Six years ago, we found one of our best investments that was trading at $1 / 2$ cash value and it had a very good business attached. We found it because of the very complicated capital structure. We thought we were the only ones to find it. We found another person on Yahoo.com who had analyzed the situation correctly. Hey, there is intelligent life out there. Get together these smart people and share ideas.

If you get $\mathrm{A}+$ in this class you could get in.
This is the application procedure. You have to know certain metrics that Yahoo members don't know.
I am not vouching for any write-up in particular. Read the reviews above 5.7 with many reviewers. You can search by rating or person. Usually 5.5 and above is pretty good. You can look at example after example and see what happened years later. You see smart investors asking questions. There is a lot to choose from here. It is a great learning tool. A great research archive to build an investment thesis. I can't recommend this highly enough. Do not share your ID for the VIC with anyone. This is a great learning resource for you.

You can search by investor and see what makes for a good write-up. We have found a number of superior investors. A simple and clear thesis.

## Review

- Stocks bounce around a lot.
- Mr. Market eventually figures it out over three years.
- The market closes the gap.
- We seek a margin of safety.


## Valuation:

What are the different Valuation Methodologies?
DCF: Discounted Cash Flow (problems) you have to make projections. The terminal value can change drastically due to small changes in assumptions. What earnings does the price imply? What growth rate and what discount rate am I using to get to that valuation three years from now? What would justify that future price? I sort of work backwards and throw in a bunch of numbers like growth rate. What is this price I am expecting it to be worth imply? I use it as a reality check to decide and see if my assumptions can be justified. What it tends to do is force me to use conservative numbers.

How do you know if you are conservative?
What if you can't figure this out-like growth rate or discount rate? Pass on it. If it is hard for me to figure it out, I go onto the next one.

Relative value: look at similar businesses and what they are trading at. Problems: the businesses are not really similar. It might be tough to find a good comparable. Everything might be overvalued in a sector, so you are comparing one overvalued asset with another. Comparables might be over or under valued.

Replicating value-I don't usually do that. The communists made square wheels because they cost the same to make as round wheels.

Break-up value: A company has two divisions one is making \$3 and the other is losing \$1 (EPS = \$3-\$1 = $\$ 2$ ). The stock trades at $\$ 34$ so $P E=\$ 34 / \$ 2=17 x$ but if you close down the bad business, it really trades at 11 times or $\$ 34 / \$ 3$.

Where the stock has traded in the past is noise. What is it worth? Where is it today (Price).
Acquisition value: You have a discount brokerage account with 100,000 accounts that acquires Brown Co's 50,000 customers, so they can pay more that company due to just adding customers to thei5r infrastructure.

The acquisition value might be much higher than the DCF value.

I don't like to see values per subscriber or x hospital beds. I still want to see the cash flows translated from the hospital beds. I don't like to see relative value.

## Summary: Valuing a Company

We have four ways to value a company:

1. DCF or intrinsic value,
2. Relative value,
3. Break-up value, and
4. Acquisition value

## Balance Sheets, Income Statements and Cash Flow Statements

A company trades at $\$ 6$ per share and it has $\$ 5$ per share in cash.
Current Assets: (CA) First we look at CASH. We have often found companies are trading at close to its cash per share. Technology stocks in 2002. \$5 per share in cash and

You can value the $\$ 5$ in the company's pocket but it is not in your pocket. What will the company do with that cash? How will they redeploy the cash?

Will they dissipate the cash or use it wisely like returning it to shareholders? Look at management and decide if they are capital destroyers. How is their bread buttered, do they own a lot of stock or are they paid mostly in salaries.

Look at where the business is-is it earning money, is it earning \$ in other businesses? Is management doing good things with the money? If management is doing good things, I may put full value on that cash. Or I won't take it at face value if the business is losing money. Make sure it is net cash.

They may need more working capital so I may have to haircut the cash figure. I usually give a discount to the cash on the balance sheet. Generally capitalism works. Are these guys’ losers. People running a business are generally more entrepreneurial. Are these guys treating it like their own money or somebody else's money? There always nuances. If I am not sure, I will put a very conservative value on the cash to take care of that uncertainty. You may say you know what; this $\$ 5$ should only be worth $\$ 3$. Do I still want to buy the company with what is left?

That $\$ 5$ really is worth $\$ 3.00$. Something as simple as cash on the balance sheet, there are many iterations of how do I look at cash? A lot of people just look and accept the cash value, but I analyze it. I will value that $\$ 5$ at $\$ 4$ or $\$ 3$. Usually this won't keep me from investing; I will just put a big discount on it (the cash). Probably when the company makes a big acquisition that is the time to sell.

## Accounts Receivables:

What are the considerations there? Does the receivable number make sense? If $A / R$ is rising quickly, then they are pumping out sales and extending credit-that may be good, it may be bad.

## Inventories:

There are ways to look at that.
Current Assets, prepaid assets.
WC: Accounts Payable, short term portion of long-term debt.
Assets: PP\&E, Real Estate (how much have those assets appreciated).
Intangibles: goodwill-the excess paid for assets above the book value of those assets.
A little secret: Operating profit. Usually I use a $40 \%$ tax rate. The number I like to use is operating profit—a pre-tax number so comparisons are easier.

D\&A are not cash expenses. Now you don’t amortize goodwill unless you write it off.
EBITDA - don't show this in your reports. You have to subtract out the maintenance capital expenditures (MCX). Now, if the company is growing and you want to figure out "normalized earnings." Capital spending is the number to use. Capex is a cash expense but depreciation is a book entry not cash.

Let us say you are opening 10 new stores in addition the 10 stores you already have, the capex would include keeping up the ten stores you already have making capex on those stores and the cost of opening the ten (10) new stores but you won't get the benefit of those new stores in that year. For normalized earnings what you really want for normalized earnings is maintenance capex. How is this number reported? Ask the management. Break out growth vs. maint. Capex.
I ask for an explanation for mcx and how do they get there. Usually the company understates mcx. When EBITDA, DA = capex, then EBIT = EBITDA - Capex. A quick and dirty when you use EBIT. I try to get at EBITDA - maint. Capex.

Discussion of maint. capex vs. growth capex.

The Cable Industry is in a continual upgrade cycle.
Look at EV/Sales, EBIT/EV. EV/EBIT is pre-tax earnings yield.

## Why you use Enterprise Value (EV)?

## COMPANY A

\$10 EBIT
40\% tax rate
\$6 in Net Income
P/E 10
$\$ 60$ million Market Cap. or EV $=\$ 60$

## COMPANY B

## \$10 EBIT

-\$5 Interest Expense
=\$5 million in pre-tax operating
$\$ 3$ mil. in int. expenses.
$\$ 15$ mil in market cap $+\$ 50$ mil in debt $=\$ 65$ in EV
A is cheaper with a PE of 10 while Company B has a P/E of 5 . The price of the EV is lower for A at $\$ 60$ vs. \$65 for B.

I look at EV to sales not P/S. The point of this exercise is that when you show me your comparables and you say the average P/E--every analyst report shows the industry ratios where they say the industry is trading at $13 x$ and this company is trading at $12 x$ so it is cheap--it doesn't take into account market capitalizations, differences in tax rates and things of that nature. And looking at things through an EV/EBIT basis does.

To make apples to apples comparison we will use EBIT/EV.
The Importance of ROIC vs. ROE
Do I care about the ROE? I care about the return on capital (ROIC).
The first thing I look at ROIC = EBIT/ (NWC + Net Equipment). How good a business is this?
Pre-tax return/Net Tangible Capital. What capital the company needs to use to be in business--NWC + Equipt. Net Working Capital (NWC): Use financial A/R and eliminate the excess cash. Subtract Accounts Payable NIB debt.

Why eliminate goodwill? Because it states historical costs. It doesn't matter what I paid. You want to know going forward what type of business you are looking at.

EBIT/EV Earnings yield. What price am I paying relative to earnings?
Avoid value traps (low return businesses).

## Hotel Capex:

Spend $\$ 1,000$ for a hotel. Then spend $\$ 25$ per year for MCX, but then in year 5, I need to refurbish the hotel for $\$ 400$ to stay competitive. So I would add ( $\$ 400 / 5$ or $\$ 80$ per year to the $\$ 25$ per year and deduct $\$ 105$ per year in true maint. capex).

| \$25 Capex | \$25 Capex | \$25 Capex | \$25 Capex | \$25 Capex | \$400 in fifth year so apportion |
| :---: | :---: | :---: | :---: | :---: | :---: |
| +\$80 Capex | \$80 Capex | \$80 Capex | \$80 Capex | \$80 Capex | \$80 mil. per year over regular |
| =\$105 Capex | $=\$ 105$ | $=\$ 105$ | $=\$ 105$ | $=\$ 105$ | MCX |

## Summary of What Joel teaches <br> in the Little Book That Beats the Market

You will learn:

- How to view the stock market.
- Why success eludes almost all individual and professional investors.
- How to find good companies at bargain prices.
- How you can beat the market all by yourself.


## The key is to understand the simple concepts in this book

Most academics and professionals can't help you to beat the market. YOU must do it yourself.
You have to believe that the story is true. Most professional investors have learned wrong and very few people believe or else there would be many more successful investors. They aren't.

## Compare Our investment alternatives

We want to compare how much we can earn from a safe bet like a U.S. government bond with our other longterm investment choices. We want to make sure we earn a lot more from our other investments than we could earn without taking any risk.

## Buying a share in a business

Buying a share in a business means you are purchasing a portion (or percentage interest) of that business. You are then entitled to a portion of that business's future earnings.

- We have to estimate what the business will earn in the future.
- How confident are we in our prediction?
- Nest year is only one year. What about all the years after that? Will earnings keep growing every year?
- The earnings from your share of the profits must give you more money than you would receive by placing that same amount of money in a risk free 10-year U.S. government bond.


## Figuring What A Business Is Really Worth?

Why do the prices of all these businesses move around so much each year if the values of their businesses can't possibly change that much?

Why are people willing to buy and sell shares of most companies at wildly different prices over very short periods of time? I just have to know that they do!

Who knows and who cares? Maybe people just go nuts a lot.
Ben Graham figured out that always using the margin of safety principle when deciding to purchase shares of a business from a crazy partner like Mr. Market was the secret to making safe and reliable investment profits.

## Valuation

How are you supposed to know what a business is worth? If you can't place a fair value on a company, then you can't divide that number by the number of shares that exist, and you can't figure out what the fair value of a share of stock is.

In the process of figuring out the value of a business, all you do is make a bunch of guesses and estimates. Those estimates involve predicting earnings for a business for many years into the future. Even experts (whatever that means) have a tough time doing that.

## Learning the Concepts

You must make a willing suspension of disbelief.
It is hard to predict the future. If we can't predict the future earnings of a business, then it is hard to place a value on that business.

If you just stick to buying good companies-ones that have a high return on capital—and to buying those companies only at bargain prices-at prices that give you a high earnings yield-you end up systematically buying many of the good companies that crazy Mr. Market has decided to literally give away.

Buying good businesses at bargain prices is the secret to making money.

## Graham's Formula:

His formula involved purchasing companies whose stock prices were so low that the purchase price was actually lower than the proceeds that would be received from simply shutting down the business and selling off the company's assets in a fire sale. He called these stocks by various names: bargain issues, net-current-asset stocks, or stocks selling below liquidation value).

Graham stated that it seems "ridiculously simple to say that if one could buy a group of 20 or 30 companies that were cheap enoughto meet the strict requirements of his formula, without doing any further analysis, the "results should be quite satisfactory." In fact Graham used this formula with much success for over 30 years.

Graham showed that a simple system for finding obviously cheap stocks could lead to safe and consistently good investment returns. Graham suggested that by buying a group of these bargain stocks, investors could safely earn a high return without worrying about a few bad purchases and without doing complicated analysis of individual stocks.

## Magic Formula Results

Over the seventeen years, owning a portfolio of approximately 30 stocks that had the best combination of a high return on capitaland a high earnings yield could have returned 30.8 percent per year. $\$ 11,000$ would have turned into $\$ 1$ million before taxes and transaction costs.

To make the Magic Formula Work:

It will be your belief in the overwhelming logic of the magic formula that will make the formula work for you in the long run.

How the Formula Works:

The formula looks for the best combination of those two factors out of a 3,500 company database. Getting excellent rankings in both categories (though not top ranked in either) would be better under this ranking system than being the top-ranked in one category with only a pretty good ranking in the other.

## No Size Effect

The Magic Formula Results for the top largest 1,000 companies: $22.9 \%$ vs. $12.4 \%$ for the S\&P 500 over 17 years. The formula works for companies large and small.

The Magic Formula seems to work in order of Deciles. There should always be plenty of highly ranked stocks to choose from

How does the Magic Formula fare vs. the market?
The formula fared poorly 5 out of every 12 months tested. Annually the formula failed to beat the market once every four years.

If the magic formula worked all the time, everyone would use it. If everyone used it, it would probably stop working. The formula doesn't work all the time.

For the magic formula to work for you, you must believe that it will work and maintain a long-term investment horizon.

## Timeless Principles

In order for the magic formula to make us money in the long run, the principles behind itr must appear not only sensible and logical, but timeless. Otherwise, there is no way we will be able to "hang on" when our short-term results turn against us.

We are buying on average above-average companies that we can on average buy at below-average prices.
The opportunity to invest profits at high rates of return is very valuable because it can contribute to a very high rate of earnings growth!

To earn a high return on capital even for one year, it's likely that, at least temporarily, there's something special about that company's business. Otherwise, competition would already have driven down returns on capital to lower levels.

In short, companies that achieve a high return on capital are likely to have a special advantage of some kind. That special advantage keeps competitors from destroying the ability to earn above-average profits.

So by eliminating companies that earn ordinary or poor ROC, the magic formula starts with a group of companies that have a high ROC.

Then the mf will buy only those companies that earn a lot compared to what we are paying.
Why the mf works?
A good track record only helps once you understand why the track record is so good.
The mf beat the market averages $95 \%$ of the time (160 out of 169 three-year periods tested)! The worst return was a gain of $11 \%$ vs. a loss of $46 \%$ for the market averages.

There are two things you want to know about an investment strategy:
What is the risk of losing money following that strategy over the long term?
What is the risk that your chosen strategy will perform worse than alternative strategies over the long term?
If an investment strategy truly makes sense, the longer your time horizon you maintain, the better your chances for success. Time horizons of 5, 110 or 20 years are ideal.

Over the long run, Mr. Market gets it right.
I guarantee that if you do a good job valuing a company, Mr. Market will eventually agree with them. Two or three years is usually all the time they'll have to wait for Mr. Market. To reward their bargain purchases with a fair price. Over time, facts and reality take over. Smart investors search for bargains, companies buy back their own shares, and the takeover or possibility of a takeover of an entire company-work together to move share prices toward fair value.

## Choosing Companies on Your Own

Choosing individual stocks without any idea of what you're looking for is like running through a dynamite factory with a burning match. You may live, but you are still an idiot.

The mf looks at last year's earnings. But the value of a company comes from how much money it will earn for us in the future, not from what happened in the past.

Ideally, we should be plugging in estimates for earnings in a normal year.

[^0]- Charlie Munger, Vice Chairman, Berkshire Hathaway
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## Greenblatt Class \#2

Sept. 14, 2005
Some definitions of Free Cash Flow = EBIT - Maintenance Capital Expenditures (MCX) - annual changes in working capital. Changes in annual working capital (WC) are due to working capital changes needed for growth.

I can't emphasize enough my recommendation to study the Value Investor's Club because you can obtain more experience and learn from other's mistakes.

Classes Oct. $5^{\text {th }} \& 12^{\text {th }}$ rescheduled for Friday Oct. $7^{\text {th }}$ and $14^{\text {th }}$ from 9 am to 12 pm URIS Room \#329 for a make up class. No class Oct. $19^{\text {th }}$.

I downloaded all the Buffett Letters from Berkshire's Web-site and then used Google Desktop to search through for any topic.

## Assignment:

I left you with the magic formula last week. Next Week Richard Pzena will talk about (Lear Corporation) and read Haugen book-focus on the concepts. Prepare Lear Corp.

An updated chart from last week's class. Cycles of Value Investing Aug. 2005
Aug. 95 to Feb. 2000: a very tough time for value investors; you remember the Internet phase. Even if you had a great company with excellent prospects, the market didn't pay for it. S\&P 500 up $163 \%$ cumulatively vs. up $91 \%$ for Value Investors- $72 \%$ underperformance. If you are running a fund and you beat the value index, the lowest $20 \%$ in BV, you would have underperformed by $70 \%$ to $60 \%$ over five years. If that happens, people leave. Even Richard Pzena, whose firm runs $\$ 50$ billion dollars, in March 2000, most of his investors had left. His performance since that time has been so phenomenal.

From March of 2000 until today, value has outperformed the S\&P 500 by 175\% and Pzena did much better than that. People left at the wrong time as usual. If you stick to your guns and your clients don't you can understand the pressures on a manager? You are looking at a chart through four years and say you will stick it out through the value cycle, but that is an awfully long time and many don't survive. Some value managers cheated with a value tilt to the S\&P, and they got clobbered. They were cheating to hang in there. Even surviving long term with this simple value model is tough.

This may seem like a minor point, but this is the whole story. Really what I am always doing is valuing the company when I can.

What happens if it is very difficult to value a company? Do something else. That is a very powerful concept if you have the luxury of looking at something else.

The guarantee I made last week is that if your valuation is right, it will usually only take Mr. Market two or three years at most-sometimes a lot faster--to get it right. Do good valuation work.

They way I define value is not low price to book or P/E but intrinsic value. You can see price/book has gotten a little less robust over time from out performing at $6 \%$ to $3.1 \%$ CAGR.

We are talking about the disparity in performance.
The lesser importance of assets with service businesses as in the past industrial period—perhaps a reason why book value losing its importance.

I analyze each company from the bottom up. I am very value driven I don't predict under or out performance of the value cycle.

## MAGIC FORMULAS

1. WHAT YOU PAY: "Normalized" EBIT/Enterprise Value (What I pay or pre-tax earnings yield). You would value EBIT higher if tax revenues are lower due to a permanent tax change. Take the after-tax yield and see what the differences are. Is EBIT representative of true cash flow. EBIT is a short hand for EBITDA - Maint. Capex. Different capitalization can skew net income. Differences in tax rates. Using EBIT is a way to compare apples to apples.
2. WHAT YOU EARN: EBIT/(NWC + NFA) the denominator shows what I need to invest in the business to get that EBIT. Don't forget to normalize investment capital over the course of a year. What I earn.

I told you about my "magic" formula as my starting point for looking at companies.
JG: You bring up a very important point. These are totally two different things.
This is how much I earn based on what I paid for it (EBIT/EV).
This is what I earn based on what the company paid for the assets that created those earnings (EBIT/IC or (NWC + NFA). Those are two totally separate concepts.

Return on the capital they made on the past. So what? Incremental dollars will make good returns but not as high as they made in the past. I may earn 60\% ROIC on the new store versus $70 \%$ previously in the old store, but there are no other places to earn as high a return so I will still build that store. But if my pretax returns are between $15 \%$ and $20 \%$, it doesn't take too much to tip the balance.

Use normalized EBIT. Look at the normal environment. This is the art part. What I think a normal environment might be. There is nothing special going on in regards to the company or the economy. Obviously it is an assessment now we are into the art part of determining "normalized".

Here is normalized EBIT over capital invested in the business. This is my best guestimate of what type of business do I have?

When I ran a defense business I had a lot of contact with investment bankers who were pitching acquisitions. They would say, "Well, you can add 20 cents to earnings and make a non-dilutive acquisition by acquiring a business at 9 x EBIT earning $11 \%$ pre-tax and that is about flat in growth while borrowing $9.5 \%$ partly fixed and partly variable. The spread is $1.5 \%$. Is this worth it for a crappy business? No.

They slapped on the same multiple we had before even though we would be a lot more levered. The investment bankers had a 400 page report with a nice cover on it, but when you get down to it, this is the bet you are taking. It looks like a bad bet.

Boil the analysis all down to its essence-is it a good business at a good price? Is the bet worth it?
Don't throw out logic. Ask one simple question. How much do I have to pay? How much am I earning?
If you have to continually make acquisitions to grow, then it is a different animal.

|  | Company A | Company |
| :--- | :---: | :---: |
| Current Assets | 3 | 3 |
| Fixed Assets | 2 | 7 |
| Goodwill | 5 | 0 |
| Current Liabilities | 1 | 1 |
| Book Value | $\$ 9$ | $\$ 9$ |
| Earnings \$2.00 per share in cash |  |  |
| Return on Tangible Capital | $50 \%$ | $22 \%$ |

You are earning $50 \%$ on tangible capital ( $\$ 2 / \$ 4$ ) unless you have to add acquisitions to get future growth. All you have to replace is fixed assets. Your capital spending will be confined to replacing fixed assets. You don't have to keep replacing Goodwill. Goodwill is a past cost. (See Warren Buffett's writing in the 1983 Annual Report of Berkshire Hathaway on amortization and intangible assets).

This took me a long time to learn, but if I had read Buffett's letter in 1983, then I would have learned this sooner.

Forget how the company got there. If the company made bad acquisitions so debt is in the EV. Goodwill is a sunk cost in past acquisitions. If management is a serial acquirer that makes bad acquisitions then the future earnings won't be what they say it will be. Adjust.
I care about what I have to pay today to generate returns today and in the future. EBIT/EV takes into account for what I paid for it.

If they have land where their factory could be moved and the land used for a higher and better use, don't just take the value of the land without considering the cost of moving the factory. Do the difference between the industrial land and the value of the land.

Why are we taking Net Fixed Assets (NFA)? It is not always right. Say we buy a hotel for $\$ 10$ and it is going to last 10 years and we write it down over 5 years and now it is at $\$ 5$. But if this goes down to zero, I might half to invest another $\$ 10$. This would give me (\$5) a skewed return (being too high) because of not considering replacement and reinvestment into the fixed assets.

Say you have 100 hotels and they are all on different cycles, then on average, you will be correct in using NFA. $10 \%$ of your hotels will be refurbished each year over a 10 year normal cycle. That is my quick and dirty for an ongoing business.

Do I have to adjust any numbers based on the unique circumstances of the business. Beware of overstating returns on capital.

Hooke, author of Security Analysis, said that you don't control the company so you take the capitalization as is so use P/E. It is the hand you drew. JG: I strongly disagree with this-reasonable minds differ-because I have been doing this a long time and EV to EBIT works better than P/E because if management doesn't optimally use optimal capitalization then someone will come in and do it for you. Using EV/EBIT is the way to go.

Acquisition value is not the same as P/E multiple.

If there are big blips in capex then there will be a hybrid between gross and net.
"Roll-ups mean lose money."
You spent the money on the stores but you don't receive the EBIT yet, so you must normalize the number for EBIT.

| Good Price | Good Business |
| :---: | :---: |
| EBIT/EV | EBIT/(NWC + NFA) |

If you are earning $50 \%$ to $60 \%$ vs. $15 \%$ to $20 \%$ then we are looking at two different animals. Then what are their growth prospects, what is there growth rate, bargain price, good business?
$20 \%$ pretax $=12 \%$ after tax. The average for business is $12 \%$.
I don't make money because I am really smart, I make money because I have a big picture in mind for what I am looking to do. The big picture in mind—is the difference between $50 \%$ to $60 \%$ vs. $15 \%$ to $20 \%$.

## Capital Cost: Opportunity cost for my capital

How JG compares investments.
For a $\$ 1$ of earnings per share after tax what $\mathrm{P} / \mathrm{E}$ for a non-leveraged company?
Now I have alternatives for my money, the risk-free return is the 10 -year bond is less than $6 \%$, I use $6 \%$.
Never lower than $6 \%$ even if the rates are $4.5 \%$. You know Buffett confirmed that when rates are below 6\%, I use $6 \%$.

Now if the 10 year bonds are $7 \%$, then I use $7 \%$ as my bogie.
$\$ 1$ at a 16.66 price earnings ratio is equivalent to $6 \%$ yield (risk free rate). If my $\$ 1$ is going to grow to $\$ 1.40$ EPs in two years, then I prefer growth vs. a static 6\%.

How do you justify 20x or 5\% yield on $\$ 1$ ? If it is growing and I am confident of that growth.
$10 \%$ pre-tax $=10 \% \times(1-40 \%$ tax rate $)=6 \%$ after-tax.
Compare the opportunities here versus my other choices. I compare a growing $5 \%$ yield to a $6 \%$ risk-free rate.
When I get the money it is after-tax from the company compared to the after tax stream from the bond.
EBIT/EV portion. Then I look at the ROIC portion.
Two businesses:
Jason's Gum Store: $\$ 400,000$ to build and $\$ 200,000$ in operating profit so $50 \%$ ROIC.
Jimbo's Just Broccoli: $\$ 400,000$ earnings $\$ 10,000=2.5 \%$ ROIC. But compared to the $6 \%$ government bond yield, Jimbo is actually losing ( $2.5 \%-6 \%$ ) $3.5 \%$ a year. This is crazy unless he thinks the profits will grow tremendously. Though it seems he is making a little bit of money ( $2.5 \%$ ), he is actually throwing money away (-3.5\%).

This is how I evaluate each business—what are they doing. I won't pay for a value destroyer. Stay out of Value Traps of just buying low P/E stocks. WEB calls them "cigar butts."
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I want to look at two things:

Am I getting a good return based on what I am paying and what are the incremental returns (MROIC) on capital? What kind of capital do I have to put in to earn that type of return?

What am I paying and is this a good business? I want to stay out of the value traps. I am really looking at normalized EBIT three or four years out vs. last year's EBIT.

How much of the money that I earn can I reinvest at the same rate. The incremental return on capital will affect my growth rate. It will affect how much my dollar will grow over time, then it will what normalized growth rates and earnings will be.

Generally, the way I solve any issues like that are...I look for what things in three years will be worth $\$ 50$ and I pay $\$ 25$ for them. If it is $\$ 45$ or $\$ 55$, I don't care; I am not smart enough to fine tune it over time. I am picking my spots. There are not that many companies are trading at that discount. It is $\$ 38$ going to $\$ 58$ in three years-24\% per year. Depending upon how confident I am in that return that may be a great rate of return. Some times I need a higher rate of return depending upon my confidence. I may take a $15 \%$ to $20 \%$ rate of return despite I like to make more than that. If I am wrong how much can I lose? If I have a lot of room to be wrong and still not lose money. The risk is low.

If the cost of hanging in there is dead money for three years and the $\$ 25$ goes to $\$ 30$ or wherever, I get an OK return. Generally, if I am good and I get 4 out of 6 right or how many I get. I look out three years. I take my best shot; I look for a wide disparity. I always looking for a catalyst or the market will realize what I see. What will make people see what I see?

This is a special situations class so I would love to have a catalyst on everything I do. Eventually, in three years or more you don't even need a catalyst. There are a lot of things that can happen. The efficient market people are right but only long term. But eventually the facts come out. Whatever people were uncertain about now over the next two or three years, they find the answer to. There are a lot of people out there trying to figure out what something is worth.

So I think the flaw with the efficient market theory is that it often takes a lot more time. There is often a lot of emotion in the short term and there is much more uncertainty involved, and people take the discounts for uncertainty but there is more opportunity if you have a longer term horizon. In the short term I don't think a stock can trade at $\$ 20$ and $\$ 35$ and nothing happens and they both can't be right. The economy doesn't change that much. In the short term, the market may not be efficient, but in the long term the market eventually gets it right.

Other times a company may buy back stock if they think it is cheap. These little pieces of paper represent the whole company. Eventually all those things work together to get the right price.

We will talk about Duff \& Phelps. I learned from that.
Break $\qquad$
(See case study material on Duff \& Phelps before reading this section)
EXERCISE: Duff \& Phelps....Buy, hold or sell? Students reviewed the annual report of Duff \& Phelps without looking at the subsequent price.

The best section is to look at the front section where they summarized five years of financial and operating history.

This is a great business, it is growing, and it requires low capital intensity. Every dollar they make is spent to buy back shares.

You want to see how the management's bread buttered. How much of their salary vs. share ownership? If they are giving themselves egregious option packages then I will take that into account.

Income grew but total assets did not grow. Their incremental return on capital is infinite. They can grow without reinvesting their capital.
Did anyone attempt to value this?
Duff \& Phelps was spun off at $\$ 7$.

EBITDA is 31.25 and EBIT is $\$ 28.8$.
EBITDA of $\$ 31.25$ minus capex of $\$ 2.5=\$ 29.535$
EV/(Ebitda - capex).

There are negative working capital businesses like MacDonald's.
Anyone see a problem with using a normalized earnings? Look at the fast growth rate of earnings. Do you think that is sustainable?

I took a normal growth rate over five years.
Three different EBIT growth rates: 8\%, 13\%, 20\%. I chose a conservative 8\% growth rate.
EBIT of $\$ 43.72$ x .6 for taxes $=\$ 26.23 \times 13 \mathrm{P} / \mathrm{E}=\$ 341$. I shrank the number of shares due to the buy backs down to 3.5 million outstanding shares. I assumed that they were buying back shares with the shares increasing in price by $8 \%$ a year. Don't forget to make assumptions about what they would do with their excess cash.
\$341/3.5 = about \$95 to \$100 per share.
So at $\$ 52$ today at $8 \%$ the stock price was $\$ 99$; at $13 \%$ the price was $\$ 122$ and at $20 \%$ the price was $\$ 164$. If I go out five years expecting to earn $20 \%$ per year, how could I earn the return sooner? Time compressed? How could I make 50\% in a year? The market figures it out sooner. I make $76 \%$ if pension funds wake up and discount the earnings at $9 \%$.

Duff \& Phelps was a small cap stock with low liquidity.

## I am always looking at value and where it is now.

This spin off was a good learning tool for (Joel's interest and work to analyze and invest in) Moody's.
Duff \& Phelps was taken over by Fitch at $\$ 100$.
Compare the multiple to the bond rate. I will take a $5 \%$ earnings yield with a great business and with growth vs. $6 \%$ bond yield that is flat.

Quality of Earnings Example: Commodore. Work in Process Inventory (WIP) growing faster than Sales.

Sunbeam Article in Barron's. Chain Saw Al stuffed the channels with inventory. Another trick is to write down inventory to 0.490 million to $\$ 0$. If there are any sales in future periods then sales will be inflated and there will be extra profits.
\$92 million in PP\&E removes D\&A so earnings are overstated.
Drop in allowance for doubtful accounts is less conservative accounting. Sunbeam still lost money after all these adjustments.

Perelman took stock at $\$ 40$ but the company was worth $\$ 7$ per share.

## Each mistake leads to better insights and subtleties.

## Greenblatt Class \#3 Presentation by Mr. Richard Pzena

Sept. 21, 2006
Three objectives:
(1) I want to talk about value investing in general: why does it works, what are the characteristics that might make you believe there is value, and what makes them (the stocks or the companies) cheap.
(2) How do you actually analyze a business? First generically—what makes a good business? I will spend a little bit of time talking about the difference between a good business vs. a bad business.
(3) Then I will use an example, Lear Corp, as something that might be a value investment. We will try to understand whether it is or is not a value investment.

Feel free to interrupt with questions any time.

## 1. Let me start with value investing.

I assume you have all read the same things, the academic studies on value investing, They all say basically the same thing that if you do invest and you are sensitive to the price you pay relative to some metric of value like book value, sales, earnings, cash-flow, you tend to naively do well. Fama \& French studies show price relative to book value metrics outperforming an index as long as they have a pretty long period to work with.

Those studies are repeated over and over again. In fact, I don't believe you can find a single 20-year period of buying the lowest deciles P/E, P/S or P/Book stocks where you wouldn't do better than buying an index. There are none. But over the long term it is a strategy that works. I don't have to use book value, the same thing works with sales, cash flow and earnings--any tangible metric of the size of the business. If you buy a stock at a low price relative to that metric, you outperform the market. Note the large out-performance of the value metrics, however there are periods of underperformance (shaded areas).

| Value Invest. Metrics Source: What Works on Wall Street, $3^{\text {rd }}$ Edition (2005) by James P. O'Shaughnessy |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Price/Earnings | 1952-59 | 1960s | 1970s | 1980s | 1990s | 2000-2003 |
| ALL Stocks | 19.22\% | 11.09\% | 8.53\% | 15.85\% | 14.75\% | 5.91\% |
| 50 High P/E Stocks | 19.27\% | 10.96\% | 2.26\% | 7.99\% | 16.99\% | -14.73\% |
| 50 Low P/E Stocks | 21.84\% | 13.96\% | 8.89\% | 7.56\% | 13.58\% | 33.55\% |
| Difference | 2.57\% | 3.00\% | 6.63\% | -0.43\% | -2.85\% | 48.28\% |
|  |  |  |  |  |  |  |
| Price/Book Value |  |  |  |  |  |  |
| 50 High P/B Stocks | 22.32\% | 13.13\% | 0.82\% | 1.97\% | 18.03\% | -31.17\% |
| 50 Low P/B Stocks | 18.86\% | 11.49\% | 17.06\% | 13.15\% | 15.83\% | 25.68\% |
| Difference | -3.46\% | -1.64\% | 16.24\% | 11.18\% | -2.20\% | 56.85\% |
|  |  |  |  |  |  |  |
| PricelCash Flow |  |  |  |  |  |  |
| 50 High P/CF Stocks | 19.30\% | 8.02\% | -3.03\% | 8.77\% | 12.77\% | -27.77\% |
| 50 Low P/CF Stocks Difference | 18.71\% | 15.41\% | 13.57\% | 12.53\% | 12.86\% | 21.23\% |
|  | -0.59\% | 7.39\% | 16.60\% | 3.76\% | 0.09\% | 49.00\% |
|  |  |  |  |  |  |  |
| Price/Sales |  |  |  |  |  |  |
| 50 High P/S Stocks | 14.96\% | 11.99\% | 5.82\% | -2.02\% | -2.46\% | -42.37\% |
| 50 Low P/S Stocks | 20.85\% | 11.15\% | 14.80\% | 20.43\% | 13.80\% | 19.94\% |
| Difference | 5.89\% | -0.84\% | 8.98\% | 22.45\% | 16.26\% | 62.31\% |

So why doesn't everyone just do it, if it is so simple? That is the dilemma for me. Even recently where you could study this data for decades. In the late nineties, you had the rare ten-year period that showed that value investing didn't work. We were in a "new world". Now we are in another "mini-new" world thesis where we will be perpetually short of industrial commodities and energy and those prices will stay high forever. Almost certainly that will end the same way (badly with price declines). You never know when, but this is what happens in the world. People love things; people hate things.

Now, if I were today to look at stocks that were the cheapest on the basis of price to book value, you would probably get a list that not one of you in this room would want to invest in. It would be the airlines, the auto manufacturers, and the insurance companies insured against hurricane losses. It would be a list of companies that you would look at and pass on.

That is why psychotics make better investors (Inside Joke. Joel Greenblatt placed a NY Times article on the board which had the headline, "Psychopaths make better investors." before introducing Mr. Richard Pzena). Because normal people look at this and read the newspaper and say that is crazy. So value investing continues to work.

What really is the mechanism that is going on that creates the opportunity in value? I want to lay out some data for you that demonstrate what goes on and what lies behind the efficacy of this strategy.

On this axis I will measure time and the other axis will be ROE. If I divide the S\&P today into five quintiles based on ROE where the highest ones are in the top left hand corner dropping down in each quintile.


If I could trace out over time what would I see? The companies with the highest profitability decline while the lowest rise--convergence to a mean. You would find that (the mean reversion process) in any market cap, any market in the world, any geographic. Any time period you use, it always looks like this.

I do not think it is very surprising. If you have a company in the left-hand corner up here making lots and lots of money (high ROE), then competitors want to enter that business to make those profits as well. So they try and over time they drive down returns.

Someone has a unique retail concept like Wal-Mart 25 years ago, or you execute it better than everybody else, then as you grow you start with the best locations and then you place new stores into less attractive locations. You don't know when to stop building Wal-Marts until the ROE begins to decline. There is no formula as to how many to build.

On the opposite side, what do you think these people are doing? They are not jumping off bridges; they are trying to fix things. The low profitability (Low ROE-lower left corner of graph) could be caused by overcapacity in an industry so they take out capacity. The cost structure is too high, they change the cost structure; the sales force orientation is not working, so they change the sales force orientation; the product portfolio may not be working, so they change the product portfolio. Everybody not in the upper left quadrant (high ROE) is trying to get there and everyone down in the lower left quadrant (Low ROE) is trying to move up there. Most of them succeed.

What is interesting is that this data is not adjusted for survivorship bias. This is including the ones that go out of business. On average companies do not go out of business. On average, poor companies do better and on average great companies that are doing wonderfully, don't do as well. That is why value investing works
because the markets extrapolate the same trends of high ROE companies continuing with the same or higher ROE while low ROE companies have lower to same trends extrapolated into the future. People just don't get it (reversion to the mean) despite many years of evidence.

The people who are buying high growth companies are trying to pick the high growth companies that will not revert to the mean. Some will be great growth or high quality franchise-kind of investors, but you are betting against the odds when you do that. People investing with the low ROE companies with low expectations should be able to outperform the market.

From The New Finance: The Case Against the Efficient Markets, $2^{\text {nd }}$ Edition by Robert A Haugen, "Investors tend to mistakenly project a continuation of abnormal profit levels for long periods into the future. Because of this, successful firms become overvalued. Unsuccessful becomes undervalued. Then as the process of competitive entry and exit drives performance to the mean faster than expected, investors in the formerly expensive stocks become disappointed with reported earnings and investors in the formerly cheap stocks are pleasantly surprised." Page 21.

All you have to do to better than mediocre is to say that you can make some judgment to eliminate the ones, which will go out of business. It is just easier because you don't do anything; just play the odds by buying low P/E or Price to Book. And I will not do any research and over time history shows me that I will win. Then you can try to be more creative by doing better than that, which is what we all spend our time trying to do.

The academic rational is very, very clear for value investing. It is also clear for other types of investing like momentum investing where price trends tend to persist. There is evidence, which suggests businesses doing well, keep doing well. This short-term data contradicts the other long-term data. People who are momentum investors will be sitting on the edge of their chair trying to figure that out when to get out. I think that is hard or harder, but it is valid method backed up by academic data. There is not a whole lot of academic data as you would see going through the Haugen book.

We are doing the opposite by buying companies having problems. There is another book, What Works on Wall Street by Shaughnessy, which is a composite of trying any possible financial statistics and seeing if it worked. Things like buying high growth companies, but it didn't have price in the variable. I would buy a great company, with great management, good growth rate and dominant market position and all of these characteristics that everyone wants in their portfolio. It is the one thing where there is no academic evidence that it works.

The premise we use is of deep value investing because in the end all of these academic studies are using the cheapest quintile or the cheapest deciles of their universe. They are not using what the index is using. If you are familiar with the indexes that institutions use to evaluate money managers, the Russell Value Index and the Russell Growth Index which takes the 1000 largest companies and breaks them into: are they either value or are they growth and puts equal market caps in both. And these consultants conclude that over time that they both do the same, so a smart strategy is to have your portfolio diversified into value and growth. This is the premise of the advice given by lots of consulting firms to institutions. One will work while the other doesn't.

Of course, the Russell Value Index is not a value index. It is not a value index in the academic sense. It is just a bunch of stocks that have some characteristics of value, but you are not capturing deep value or the academic version of value. I am trying to distinguish here between a value approach that can buy companies that are low ROE companies and accept that they are not probably going to stay there (move to higher or improving ROE) and ignore the high ROE companies.

When I make a presentation to value investors or when I receive a call from my investors, the single most common question from them is: "Don't you read the papers?" Because if you did then how could you be buying.....didn't you see that their earnings were terrible or they just lost a big account or their customers are bankrupt and on and on and on.....

That is why these things are cheap. They are cheap for a reason. The point that I am making is that you never, never find things that are cheap for no reason. I hope to find one some day but it doesn't happen. You have to accept that you don't get the best businesses with great management teams with high margins, with great growth rates and high market share selling at low prices. You don't get those. But good businesses can sell for low prices generally when one or more of those things listed above are missing. When there is some blood on the table.

A basis for contrarian investing: There is some evidence that suggests that markets do overreact to both good and bad news, especially in the long term, and that stocks that have done exceptionally well or badly in a period tend to reverse course in the following period, but only if the period is defined in terms of years rather then weeks or months (Source DeBondt \& Thaler).

## 2. Businesses in General

Let us talk about businesses in general.
Student: What time horizon are you speaking about regarding the ROE change and decline for high ROE Companies?

Richard Pzena (RP): About five years. On average their economics deteriorate while the low ROE companies improve.

If you can combine a company that has a low valuation and should have a sustainable edge, but may, in the present, may not be experiencing it for some--and it may be temporary--reason, then you have this unbelievably powerful combination. If you can buy a good business at a low price, then you have nirvana.

## Characteristics of good businesses

- High Barriers to Entry
- High Margins
- Good management
- Pricing Power

Low capital intensity--RP: but doesn't a company with low cap intensity have low barriers to entry? (Sees Candy is a counter example). I think capital is a barrier. Would you pursue competing against Boeing with enough capital and find a good person to do that? Is there a barrier to entry? Clearly if no capital is required then there is easier entry.

Why is it that Boeing over time produces good profit margins but Sprint or Verizon Wireless doesn't--they are both equally capital intensive? Answer: High switching costs. Concentration of the marketplace--wouldn't you say an industry with two players vs. eight players has a higher chance for rational behavior? (Boeing and Airbus make up the two major air plane manufacturers in the world, so the structure of the market is an oligopoly with more rational pricing and high barriers to entry).

Will jetBlue sustain its high profit margins? Would you want to bet that? Does jetBlue have a sustainable competitive advantage for the long term? What is that? Better quality of service. How do you account for the fact that the (Airline) industry has been unbelievably unprofitable its entire life? Last cycle SouthWest Airlines (SWA) was the JetBlue. Now SWA is history. How does JetBlue all of a sudden appear? And if JetBlue can appear all of a sudden, why would you be confident that another JetBlue doesn't all of a sudden appear? (The Airline Industry has easy entry with no incumbent competitive advantages).

JetBlue has a no barriers to entry model. There may someday be barriers to entry unless there is a slot restricted type of markets. JetBlue could go to an airplane leasing company so capital was not a barrier. An airplane holds its value. If lease financing was not available and airplane values were highly erratic, then you might have a different outcome.

If one guy is standing out better than everyone else, I would be nervous. jetBlue probably has a good business model given the industry. Clearly, the history suggests the industry is a bad business.

## What are some barriers to entry?

- High switching costs
- High capital costs
- Brands
- Lower operating costs (airline with 1 low cost fleet, by operating in a certain way, locks you in)
- Tobacco with its addicted customers

Value investing works because it doesn't always work. Just naively using value metrics would allow you to outperform the benchmarks.

## Barriers to Entry

- Patented technology
- Government regulations No advertising in chewing tobacco, so SKOL has an advantage
- Brands
- Customer captivity and Economies of Scale: An Airline with same models allows it to operate cheaper than competitors, which causes customer lock-in.

So we have a general view of what makes a good company....I think the important point comes in many forms. It could be simple like physical location where you have a ten-year concession to sell trinkets at the Statue of Liberty. You could have natural resources (low cost copper mine), low transport costs (A Rock Quarry) so physical assets and location could be one form of barrier to entry.

Another could be some form of competitive cost advantage like a mining company-a copper deposit that costs 10 cents to extract while everyone else is at 50 cents a pound, I would say that business is nicely protected. It could be a patent or a technology-you have something that no one else has or will have.

Coca-Cola has a franchise-nobody spoke about franchises-- where it has been built over decades which give Coke a competitive advantage of high barriers to entry. Coke is associated with good things; it has mind share.

I would define a good business where you can identify specifically a reason why it should be able to earn an excess return on its cost of capital. It has to be a simple reason that you can clearly see.

The Auto Industry is the exact opposite where it is actually easy to see why it wouldn't earn the cost of capital. It is a commodity business, because it is a high fixed cost business where capacity is relatively fixed and the product has a cyclical sales cycle, so people kill each other because they can't produce above their fixed costs. You normally see it with their historical return on capital or ROE over time. Look at the last 10 or 20 years of the company and say, "Is it (ROIC) high? Is the ROE high? If you do this analysis, any company that has been able to earn in excess of $10 \%$ to $12 \%$ on total capital employed after tax over time, you have to say to yourself, "OK, this looks like a good business.

Now can I identify why it is a good business? I would say JetBlue is earning above its cost of capital and therefore is a good business, but do I understand why? Yeah, I get it. I think it is sustainable, then you have a good business.

## If I can combine a cheap price with a good business, that is what I am trying to do.

One, I want to talk about: Is it a good business? Then go through the characteristics of the company and ask if it is a good business or not?

Student: High ROIC, High ROE and you see it is sustainable—it looks like a good business. How do you ascribe this to your earlier point of regression to the mean?

RP: Typically, good businesses where you are seeing that on a consistent basis, you rarely see them cheap, they are not good stocks to invest in.

## What creates value?

What creates value? We talked about how value gets resolved-the bad stops being bad and things don't stay good forever. How does value get created? Value gets created for almost the same reason, because something went wrong and because there is deterioration. Something went wrong.

The pattern is almost always the same. If you have a company that is chugging along just fine and something falls off trend--that is what creates value. The stock price, especially if the price is looking far out into the future for a continuation of earnings growth, the price will fall dramatically if the earnings fall off their trend.

The dilemma that every value investor faces: the academic studies also show that buying a stock in a business that is deteriorating is a bad idea because there is serial correlation in goodness and in badness-which is counter to the ROE example and argument. Both of those phenomena are happening. In the short term there is serial correlation and in the long run there is competitive pressure. They both have an impact. It is deterioration that creates value.

So if you buy a stock that is deteriorating, you are an idiot. The problem is that if you wait for the earnings to turn or the catalysts or the revisions from Wall Street, then you will be too late and not get a cheap price.

Student: Would you have a preference for a good business or a low price?

RP: I would invest in only a cheap stock, but I would give credit for a good business to the extent that that good business justifies better earnings power. For me the issue is price relative to the companies normalized earnings power. So if I had to pay up for $K O$ just to feel better because $\overline{K O}$ has a stable earnings base, I wouldn't do it. But if it translates into higher earnings than some other investment and I could quantify that my price is low relative to some future earnings power, then I will (invest). I have never found $K O$ to be cheap.

What you find is the business deteriorates and management tries to do something and then the business stabilizes at a lower level. This is where I try to buy-in the trough of stabilization of the business. Most people are unwilling to buy it here because most people don't know if it is going to go back up here.


You can speculate because it is a good business because of this, this and this but it isn't going up right now. But I am going to buy it because I know if it does go up, I am going to make a lot of money and if it doesn't, I won't lose a lot of money. There is a better risk/reward trade-off.

Value is created by deterioration. The price drop relates to the deterioration while the value captured is associated with price reverting back to trend or the mean. You have to accept further price declines when you buy while the business continues deteriorating, and if you wait, you will pay up while recovering and miss a good opportunity. Once you can see a catalyst, you are late and you are playing partial momentum here.

## SUMMARY

You have better odds in the value camp, because you are playing in a better field. So if I was mediocre, I would beat the market.

## Value Investor:

Invest in fifth quintile:
Low price/Book or P/E

## Add Value:

Is this a good business (high ROITC)?
Low value due to permanent or temporary problem? Determine the difference.

But to be great one must distinguish--what this tells you (lowest quintile) is that those companies are experiencing problems; some are experiencing temporary problems. The way you can add value is to distinguish between temporary and permanent problems. Getting a good business at a good price is nirvana. A low price will be associated with problems surrounding the company and its business.

## 3. LEAR CORPORATION

What does Lear Corporation (LEA - NYSE) do? They are a supplier of parts to the auto manufacturers. They make seats.

Is this a good business? It doesn't look like a good business? Why? They make a commodity—seats and auto parts?

| Bad Characteristics of LEAR | Good Characteristics of LEAR |
| :--- | :--- |
| (LT) Squeezed by concentrated customers | (LT) Established quality reputation-concentrated customers |
| (ST) SUV Reliance (two years ago in the + column) | (LT) Ideal Outsourcer--this is why they grow |
| (ST) Cyclical Peak | Asian Growth |
| (ST) European Slowness | Rational capacity |
| (LT) High Debt--it can be a permanent issue. |  |
| (ST) Rising raw materials |  |

Characteristics of long-term vs. current environment.
Too much capacity is a bad thing, but rationalization of capacity is a good thing.
Let us go back and review which of these characteristics are characteristics of the company and the markets in which they compete in long term and which of these are typical of the current market.

When I am asking about what makes a good business vs. what makes a bad business, I am not talking about current conditions.

Toyota outsource seat supplies so why couldn't Lear supply in the future?
Europe is $65 \%$ outsourced while the US is $90 \%$ outsourced. Lear has a flexible, low cost model. Though Lear has a union work force, they can lay off workers and close down plants.

The auto manufacturer (Ford or GM) puts investment into a model, which will either do well or not. The cyclicality will average out over time. Lear is in a different fixed cost position than the auto manufacturer. You can say that is bad because of their concentrated customer base.

## Questions:

I think we are mixed about whether this is a good or bad business.

| ROITC for Lear | $31 \%$ | 1995 |
| :--- | :---: | :---: |
| ROITC after-tax | $34 \%$ | 1996 |
| ROITC | $22 \%$ | 1997 |
| ROITC | $30 \%$ | 1998 |
| ROITC | $30 \%$ | 1999 |
| ROITC | $18 \%$ | 2000 |
| ROITC | $32 \%$ | 2001 |
| ROITC | $30 \%$ | 2002 |
| ROITC | $20 \%$ | 2003 |

The business has thin margins and a high return on invested capital. There are low working capital requirements and equipment needed. Just in time inventory--the time they get the order before the seat is delivered to the auto plant is three hours. Conflicting signals: thin margins but high ROITC. How? Low capital requirements. This is a bunch of guys in a warehouse throwing things together.

There are a lot of assets on the balance sheet--goodwill--so when you see their return on capital it is not as good as shown. We are using tangible capital not including goodwill.

Remember my definition: If the business has a ROC greater than its cost of capital, it is an indication that it is a good business. Now we have to ask, "Is it luck; is it sustainable? Why is that?"

It is really rare to find that kind of capital return. If you are generating $30 \%$ returns after tax, then you can pay down debt rapidly because of slow growth absent acquisitions. How do they achieve this?
There are high barriers to entry which are high market share. They are sole source suppliers on every one of their supply contracts. Now their customers have the contracts bid out, but there are only one or two competing bids. Johnson Controls is their only other major competitor. Johnson Controls probably has a similar cost structure to Lear and would bid rationally.

There have been two sources of growth in this business over the last twenty years (in the industry): 1.) More complex seats with customer controls, etc. or content per vehicle is going up. Increasing seat content due to two sources: the seats are getting fancier and the cars are getting bigger. 2.) There is more outsourcing.

There has been growth, but still nobody has entered their business. Why? Customers are locked-in. A customer is likely to say, should I risk a new supplier if there is a chance that they can't deliver? The risk for hurting a customers' processes is too great too risk. The structure of the market is that you bid on the contract for the life of the model, so incremental business comes up rarely. Another competitor is unlikely to take market share.

What is the ROITC in 2005? I think they will lose money this year. Certainly they are running on a negative rate of return so far as of end June 2005.

There are two possibilities: 1.) This really is a crappy business and now we should accept it or
2.) We have a temporary problem going on. We don't understand what it is.

What is causing these problems?
High raw material costs with fixed price contracts--a temporary problem. Once the contract is over, there is another negotiation. How does the pricing mechanism work? Did anyone read up on that? GM's only choice is to squeeze suppliers (the Bear Argument).

Ask the guy who is running this business what he will do. Now, let's be analysts, and ask. If you were in charge of Lear, what would you do?

Lear’s reply, "Our Number One Strategy: Grow our business with others who are not in such bad shape."

Let me ask a question....did anybody look at the competitor? Johnson's Controls earnings went down by the magnitude of their business to GM, which was not nearly the decline in Lear's business. Why?

Lear and Johnson did not contract on the same basis. Lear contracted on a company by company basis while Johnson Controls contracted on a model by model basis. So Lear didn't care if they made money on any particular model. So when GM said, "You are making all this money on our SUVs, can you give us a break on car seats over here so we don't show huge losses every time we sell a car. Lear is happy if the whole contract is profitable, but when $S U V$ sales collapse, then there is a problem.

What does the guy at Lear Corp. do?
Let us say you are selling a seat for $\$ 500$, which costs $\$ 600$ to make, so you are losing $\$ 100$, and you are selling a SUV seat for $\$ 1,000$ that costs you $\$ 800$ to make so you are netting $\$ 200$. This is what Lear was doing. So what does Lear do?
"Excuse me, but we have to raise prices on this because we are losing money." They bring the numbers to $G M$ and ask to raise the price. They have price adjustment clauses in all the contracts. That as always meant in the past, GM saying we need $5 \%$ lower prices this year. Lear would say, OK, here is what a $5 \%$ lowerpriced seat looks like. Lear gives GM a different seat--1/2 leather and 1/2 plastic.

Will Lear be successful in their renegotiation? You have no idea. Look how much steel and plastic costs are, so we pass on the costs to you. GM says, "You are killing me; you make me break my prices. I need a break." How will it be resolved?

Let us switch gears and jump away from what is going to happen now.
I want you to forecast what the earnings will be five years from now. Let's say the average contract is four years, the average model life is four years. I want to forecast the earnings of this company.

1. Auto production of $1 \%$ increase of top-line growth in the industry. $\$ 16.5$ million to $\$ 17$ million in sales as a starting point. Cars/unit mix skewed.
2. Market share for market
3. Content per vehicle. Big Three/Others market share: 65\%/35\% 55\%/45\% 60\%/40\% 55\%/25\%

Volume will stay the same at $1 \%$ growth. Unit sales will be flat. Content per vehicle is $5 \%$ now, so above trend. I would argue we scale back the $5 \%$ to $2 \%$. What about profit margins compared to the average of the past two years' margins? We will keep at $5 \%$ to $5.5 \%$.
$\$ 17$ billion in sales times 5.3\% net margin $=\$ 900$ million minus $\$ 170$ million interest expense $=\$ 730$ million times (1-33\% tax rate) = \$490 million then divided by 67 million outstanding shares $=\$ 7.30$ per share. At today's $\$ 33$ share price with EPS of $\$ 7 /$ share $=$ less than 5 times earnings.

Now let's dig down into this. $15 \%$ of their business is bad. The interior products business is selling a commodity-like product, competing against Asian manufacturers. What do we do about this division? Shut it down. 8-K came out today where management describes the business:

## From 8-K Filed on Sept. 19 ${ }^{\text {th }}, 2005$

## Section 2 - Financial Information Item 2.06 Material Impairments

In accordance with Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets," Lear Corporation ("Lear" or the "Company") periodically evaluates the carrying value of its goodwill for indicators of impairment. SFAS No. 142 requires the Company to evaluate the carrying value of its goodwill for potential impairment on an annual basis or on an interim basis if there are indicators of potential impairment.

As previously disclosed, in conjunction with Lear's restructuring program, the Company is continuing to evaluate strategic alternatives with respect to its Interior segment. This segment continues to experience
unfavorable operating results, primarily as a result of higher raw material costs, lower production volumes on key platforms, industry overcapacity, insufficient customer pricing and changes in certain customers’ sourcing strategies. Based on the foregoing, Lear concluded on September 19, 2005, that the Interior segment's goodwill has been materially impaired. At this time, Lear is unable to make a good-faith estimate of the amount or range of amounts of the impairment charge. Such impairment charge will not result in future cash expenditures. Lear will file an amended report on Form 8-K pursuant to this Item 2.06 within four business days after it makes an estimate of such amount or range of amounts. Further, an estimate of the goodwill impairment charge will be recorded in accordance with SFAS No. 142 in the Company's third quarter 2005 financial results.

I read that as no value. The Interior Segment should have no value ascribed to it.
We knock 15\% off of our earnings forecast. \$7.30 knocked down to \$6.00.
Let's not forget what happens with no growth and 67 million shares. How many shares outstanding you suppose they will have in five years? (What do they do with their FCF?). So $\$ 400$ million FCF per year or $\$ 2$ billion after 5 years, then at $\$ 33$ per share, there is more than enough to buy back the whole company. However, we assume that Lear will have $\$ 400 \mathrm{~mm}$ in FCF next year. It is better to assume $\$ 0$ going to $\$ 400$ mm the next year. Lear will either pay down debt and lower interest expense to raise earnings or buy back stock and that will raise earnings. If Lear takes two years to reach normalized margins and operating income then let us assume at the end of five years, it has $\$ 1$ billion to buy back shares (over 30 million shares at $\$ 33$ per share) or to pay down debt.

## Conservative Assumptions

So even with these very conservative assumptions:
No top line growth, average margins, and getting out of the crappy businesses, which by the way probably depressed the margins in the good business so closing that down will raise the average margin going forward. It looks like there will be a lot of earnings. You have a margin of error here and a good risk \& reward.

Management thinks that that they will be making $\$ 3.5$ per share next year if you ask them. And what do they know. They know the status of negotiations with GM \& Ford and you don't. It doesn't mean that they are the most credible and reliable people in the world but that is what they are saying.

Lear could miss earnings this year and next year and you take a bet that steel prices go down. I have no clue about trading strategy, but I won't bet that steel prices keep going up.

Lear has $\$ 6$ earnings power. $\$ 33 / 6=5.5 x$ s about $5^{\text {th }}$ least expensive in our stock rankinguniverse. We rank each company to its earnings power so it is at a $5 \mathrm{P} / \mathrm{E}$ vs. $14 \mathrm{P} / \mathrm{E}$ for the market. Fair value is $\$ 6$ in normalized earnings times $14 \mathrm{P} / \mathrm{E}$ equals $\$ 84$. It is a big number. If it took five years to triple your money would you be willing to wait? I don't think it is five years. I wouldn't sell it unless it ran tomorrow from $\$ 33$ to $\$ 75$. I do think it is one of the cheapest stocks out there, for good reasons.

I never forecast problems. I say if there is trouble now, I might wait. Lear is renegotiating its contract, it is going to be better. Always things are going on. Their margins have to be higher barring a major world catastrophe. The fundamentals are not deteriorating. If things get better, the stock will rise a lot, but if conditions don't improve, then you won't lose much.

Even if GM \& Ford go bankrupt, they will still make cars. Interest rates go up causing a consumer recession could hurt. Auto suppliers as proof. Delphi/Visteon sell little parts--a lot of competition with no barriers to entry. Big parts like car seats are difficult to import and have barriers to entry. There are big parts and there are small parts--two different businesses.

Our screen for Lear:

Our growth rate for Lear was $13 \%$ because of past acquisitions and then the computer takes the industry growth rate and averages it $(13 \%+8 \%) / 2$. We have $\$ 12$ per share in earnings.
There are two reasons for making the margins higher:

1. Closing down the crappy business but sales will go down with it.
2. The European market is not as good as the US market and that will get better structurally in the future.

They are tied to a company, GM that is losing share.
$\$ 1$ billion in debt coming due in three years.

## Johnson Controls bought York-scary!

What is the top feature of seats for commuters--comfortable seats.
The top feature for SUV customers--power seats.
Once you have a large cap company over $\$ 1$ billion in market cap, the possibility of growth at high rates is very low.

I think the earnings power for Lear will rebound rather quickly.
Johnson Controls overpaid for York. It is cheap too on the scale of the market as a whole.


## Greenblatt Class \#4 <br> Bruce Newberg, an Independent Individual Investor

Sept. 28, 2005
The next class will be Oct. 5 on a Friday in Room 329 from 9 AM to 12 Noon.
We have another guest speaker for part of the class today.

Joel Greenblatt (JG): Anyone notice a problem with Richard Pzena’s methodology?
Student: He uses a multiple that is not tailored to the particular business; instead he uses a general multiple of 14.

JG: In Richard’s defense a 12-15 multiple works pretty well there too.
What I saw is that he (Richard Pzena) is a lot smarter than you or me. I left that class saying, Gee, if I have to be that smart to make money then there doesn't seem to be much chance for me. We are sort of at the same level while Richard is way up here (hand raised high above his head). That is the only flaw I saw. Having said that, mere mortals can also do this stuff.

We also have an incredible presenter, Bruce Newberg (BN); we all went to school together at Wharton Business School. He approaches things a little bit differently. He was actually head of convertible arbitrage at Drexel/Burnham. For the last 15 years, he has been investing on his own incredibly successfully. Being an individual investor gives you a lot of flexibility and this being a class on special situations he is a great example. You can actually do a lot more with the less money you have.

Running a smaller amount of money enhances flexibility and returns. Buffett (WEB) said he could earn 50\% a year with $\$ 1$ million a year. Now $W E B$ runs billions so he says that a large amount of money is the enemy of performance. He says he will have trouble exceeding $15 \%$ per year. Bruce Newberg looks at the whole world. He has many, many war stories.

He will recount a few today and he will go into how you might find interesting things for yourself.

Bruce L. Newberg as Trustee of the Newberg Family Trust
11601 Wilshire Boulevard, Los Angeles, CA 90025
Bruce Newberg (BN): Well, I am not as smart as Joel Greenblatt and I am certainly not as smart as Richard Pzena. Basically, I have to find easier ways to make money than figuring out Lear Corporation (LEA).

I am going to talk to you about a situation in 2002 that to me was pretty simple. It was a company called MIPS Technologies that was a spin off out of Silicon Graphics. See next page.


In thousands)
September 30, June 30,

## MIPS

$\frac{2003}{\text { (unaudited) }} \xrightarrow{2003}$

| ASSETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Current assets: |  |  |  |  |
| Cash and cash equivalents | \$ | 73,692 | \$ | 83,839 |
| Short-term investments Close to \$2/Share in cash |  | 4,975 |  | - |
| Accounts receivable, net |  | 4,010 |  | 4,762 |
| Prepaid expenses and other current assets |  | 2,603 |  | 3,648 |
| Total current assets |  | 85,280 |  | 92,249 |
| Equipment and furniture, net |  | 5,607 |  | 4,202 |
| Intangible assets, net |  | 3,621 |  | 3,769 |
| Other assets |  | 3,590 |  | 5,129 |
|  | \$ | 98,098 | \$ | 105,349 |
| LIABILITIES AND STOCKHOLDERS' EQUITY |  |  |  |  |

Current liabilities:

| Accounts payable | $\$$ | 523 | $\$$ |
| :--- | ---: | ---: | ---: |
| Accrued liabilities | 9,034 | 10,977 |  |
| Deferred revenue | 2,248 | 2,592 |  |
| Total current liabilities | 11,805 | 14,073 |  |
| Long-term liabilities | 2,496 | 1,900 |  |



| Three Months Ended <br> September 30, |
| :---: |
| $2003-2002$ |


| Operating activities: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Net loss | \$ | $(5,763)$ | \$ | $(3,878)$ |
| Adjustments to reconcile net loss to net cash used in operating activities: |  |  |  |  |
| Depreciation |  | 1,002 |  | 1,182 |
| Acquired in-process research and development |  | - |  | 394 |
| Amortization of intangibles |  | 308 |  | 651 |
| Other non-cash charges |  | (3) |  | (23) |
| Changes in operating assets and liabilities: |  |  |  |  |
| Accounts receivable |  | 752 |  | 3,310 |
| Accounts payable |  | 19 |  | (567) |
| Other assets and liabilities, net |  | 905 |  | 228 |
| Net cash provided by (used in) operating activities |  | $(2,780)$ |  | 1,297 |
|  |  |  |  |  |
| Investing activities: |  |  |  |  |
| Purchases of short-term investments |  | $(4,975)$ |  | $(5,000)$ |
| Capital expenditures |  | $(2,410)$ |  | (334) |
| Acquisition of Algorithmics Limited and an affiliated company, DFS3 Limited, net |  | - |  | $(1,265)$ |
| Payment related to purchase of intangible assets in a prior period |  | - |  | (900) |
| Net cash used in investing activities |  | $(7,385)$ |  | $(7,499)$ |
|  |  |  |  |  |
| Financing activities: |  |  |  |  |
| Net proceeds from issuance of common stock |  | 15 |  | - |
| Loan repayment |  | - |  | (302) |
| Net cash provided by (used in) financing activities |  | 15 |  | (302) |
| Effect of exchange rate on cash and cash equivalents |  | 3 |  | 2 |
| Net decrease in cash and cash equivalents |  | $(10,147)$ |  | $(6,502)$ |
| Cash and cash equivalents, beginning of period |  | 83,839 |  | 90,712 |
| Cash and cash equivalents, end of period | \$ | 73,692 | \$ | 84,210 |

Formation of MIPS Technologies, Inc. (MIPS). MIPS Technologies, Inc.'s predecessor, MIPS Computer Systems, Inc., was founded in 1984 and was engaged in the design and development of reduced instruction set computing, or RISC, processors for the computer systems and embedded markets. Silicon Graphics, Inc. (Silicon Graphics) adopted the MIPS architecture for its computer systems in 1988 and acquired MIPS Computer Systems, Inc. in 1992. Following the acquisition,

Silicon Graphics continued the MIPS processor business through its MIPS Group (a division of Silicon Graphics), which focused primarily on the development of high-performance processors for Silicon Graphics' workstations and servers. In order to increase the focus of the MIPS Group on the design and development of processor applications dedicated to the embedded market, in December 1997 Silicon Graphics initiated a plan to separate the business of the MIPS Group from its other operations.

In April 1998, our Board of Directors approved a transaction pursuant to which Silicon Graphics transferred to us the assets and liabilities related to the design and development of processor intellectual property for embedded market applications. From the closing of our initial public offering on July 6, 1998, until June 20, 2000, we were a majority owned subsidiary of Silicon Graphics. On June 20, 2000, Silicon Graphics distributed all of its remaining interest in MIPS in the form of a stock dividend of Class B common stock to its stockholders.

Years Ended June 30,
2005 (1) 200420032001

| Consolidated Statements of Operations |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Data: |  |  |  |  |  |  |  |
| Revenue: |  |  |  |  |  |  |  |
| Royalties | \$ 29,988 | \$ 23,439 | \$ | 15,693 | \$ | 16,791 | \$ 41,931 |
| Contract revenue | 31,231 | 24,446 |  | 23,397 |  | 30,970 | 42,978 |
| Total revenue | 61,219 | 47,885 |  | 39,090 |  | 47,761 | 84,909 |
| Costs and expenses: |  |  |  |  |  |  |  |
| Cost of contract revenue |  |  |  | 250 |  | 250 | 250 |
| Research and development | 21,911 | 23,962 |  | 32,863 |  | 34,045 | 33,902 |
| Sales and marketing | 14,851 | 11,878 |  | 13,759 |  | 17,189 | 15,833 |
| General and administrative | 10,283 | 8,486 |  | 8,508 |  | 7,435 | 9,007 |
| Acquired-in process research and development |  |  |  | 394 |  | 1,737 |  |
| Restructuring charge (2) | 277 | 3,233 |  | 10,282 |  | 437 |  |
| Total costs and expenses | 47,322 | 47,559 |  | 66,056 |  | 61,093 | 58,992 |
| Operating income (loss) | 13,897 | 326 |  | (26,966 ) |  | (13,332 ) | 25,917 |
| Other income, net | 2,412 | 591 |  | 303 |  | 3,028 | 6,287 |
| Income (loss) before income taxes and the cumulative effect of change in accounting | 16,309 | 917 |  | (26,663 ) |  | (10,304 ) | 32,204 |



June 30,

## ASSETS

Current assets:
Cash and cash equivalents

| $\$$ | 78,335 | $\$$ | 83,839 |
| ---: | ---: | ---: | ---: |
| 15,041 |  |  |  |
|  | 2,488 |  | 4,762 |

Accounts receivable, net of allowance
2,488 4,762
of zero at June 30, 2004 and $\$ 183$ at June 30,
2003

| Prepaid expenses and other current assets | 3,159 | 3,648 |
| :--- | ---: | ---: |
| Total current assets | 99,023 | 92,249 |
| Equipment and furniture, net | 3,578 | 4,202 |
| Intangible assets, net | 3,176 | 3,769 |
| Other assets | 2,926 | 5,129 |

\$ 108,703 \$ 105,349

## LIABILITIES AND STOCKHOLDERS' EQUITY

## Current liabilities:

Accounts payable
\$ 1,255 \$
504

| Accrued liabilities | 12,344 | 10,977 |
| :---: | :---: | :---: |
| Deferred revenue | 3,407 | 2,592 |
| Total current liabilities | 17,006 | 14,073 |
| Long-term liabilities | 2,038 | 1,900 |
|  | 19,044 | 15,973 |
| Stockholders' equity: |  |  |
| Class A common stock, \$0.001 par value: |  | 15 |
| 0 and 150,000,000 shares authorized at |  |  |
| June 30, 2004 and 2003, respectively; 0 and $15,499,010$ shares outstanding at June 30, |  |  |
| 2004 and 2003, respectively, net of 0 and 5,317 reacquired shares at June 30, 2004 and 2003, respectively |  |  |
| Class B common stock, \$0.001 par value: |  | 25 |
| 0 and 100,000,000 shares authorized at |  |  |
| June 30, 2004 and 2003, respectively; 0 and $25,057,715$ shares outstanding at June 30 , |  |  |
| 2004 and 2003 respectively, net of 0 and |  |  |
| 12,044 reacquired shares at June 30, 2004 and at June 30, 2003, respectively |  |  |
| Common stock, \$0.001 par value: 250,000,000 | 40 |  |
| and 0 shares authorized at June 30, 2004 |  |  |
| and 2003 respectively; and 41,020,061 |  |  |
| and 0 shares outstanding at June 30, 2004 |  |  |
| and 2003, respectively, net of 17,361 and |  |  |
| 0 reacquired shares at June 30, 2004 and at June 30, 2003, respectively |  |  |
| Additional paid-in capital | 181,511 | 180,504 |
| Accumulated other comprehensive income | 867 | 702 |
| Deferred compensation | (695 ) | (1,337) |
| Accumulated deficit | (92,064 ) | (90,533) |
| Total stockholders' equity | 89,659 | 89,376 |

BN: MIPS was a spin out of Silicon Graphics. MIPS had two classes of stock, A \& B. They had 40 million outstanding shares. The two securities traded at different prices where the $B$ shares traded below the A shares. It was actually an arbitrage where they were both going to be converted into the same class of shares yet the A shares traded at a $10 \%$ plus price to B shares. The B shares had more votes than A and automatically converted 5 years after the spin-off and there was a potential that they could be converted before that.

In 2001 technology came off of the Internet Bubble, and a lot of technology was having a slow down. MIPS had more than that. When MIPS went public, MIPS was in the business of licensing semiconductor technology to people who were developing chips. Those chips went into a lot of devices. Their first chip went into the Nintendo 64 video games. Now that was a short-lived experience and it became apparent at the end of 2001 as the Nintendo video games were plunging.

What I want to show you first of all about the stock and then a little bit about the balance sheet. It goes to show you about the efficient market theory as to the value of this company at $\$ 2.4$ billion dollars in 2000. We focused on MIPS in this range (\$3 to \$2) while it became apparent that MIPS sales were falling off the back of the truck and the company was beginning to lose money. Let me show you what I was looking at back then.

Now this company had 40 million outstanding shares so if you look at the Mar. 02 10-Q:

## March 31,

ASSETS

Current assets:

## Cash and cash equivalents <br> Short-term investments

Accounts receivable
Prepaid expenses and other current assets
Total current assets
Equipment and furniture, net
Intangible assets
Other assets
LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities:

| Accounts payable | \$ | 468 | \$ | 3,184 |
| :---: | :---: | :---: | :---: | :---: |
| Accrued liabilities |  | 6,309 |  | 10,472 |
| Deferred revenue |  | 3,593 |  | 4,069 |
| Total current liabilities |  | 10,370 |  | 17,725 |
| olders' equity: |  |  |  |  |
| Common stock |  | 39 |  | 39 |
| Additional paid-in capital |  | 176,363 |  | 175,520 |
| Accumulated other comprehensive loss |  | (459) |  | (615 ) |
| Accumulated deficit |  | (58,341 ) |  | (52,236 ) |
| Total stockholders' equity |  | 117,602 |  | 122,708 |

\$ 127,972 \$ 140,433

## MIPS TECHNOLOGIES INC <br> 05/10/2002

## Income Statement

|  | Three Months Ended March 31, |  |  |  | Nine Months Ended March 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2002 | (Restated) |  |  | 2002 | (Restated) |  |
| Revenue: |  |  |  |  |  |  |  |  |
| Royalties | \$ | 4,135 | \$ | 16,106 | \$ | 13,580 | \$ | 34,204 |
| Contract revenue |  | 8,607 |  | 12,029 |  | 23,635 |  | 33,082 |
| Total revenue |  | 12,742 |  | 28,135 |  | 37,215 |  | 67,286 |
| Costs and expenses: |  |  |  |  |  |  |  |  |
| Cost of contract revenue |  |  |  |  |  | 250 |  | 250 |
| Research and development |  | 8,446 |  | 9,543 |  | 25,315 |  | 24,867 |
| Sales and marketing |  | 4,916 |  | 4,272 |  | 13,270 |  | 11,414 |
| General and administrative |  | 1,948 |  | 2,557 |  | 5,506 |  | 6,801 |
| Acquired in-process research and development |  |  |  |  |  | 1,737 |  |  |
| Restructuring |  |  |  |  |  | 437 |  |  |
| Total costs and expenses |  | 15,310 |  | 16,372 |  | 46,515 |  | 43,332 |
| Operating income (loss) |  | (2,568) |  | 11,763 |  | (9,300 ) |  | 23,954 |
| Other income, net |  | 510 |  | 1,651 |  | 2,415 |  | 4,883 |
| Income (loss) before income taxes |  | (2,058) |  | 13,414 |  | $(6,885)$ |  | 28,837 |
| Provision (benefit) for income taxes |  | (380) |  | 4,875 |  | (780) |  | 11,044 |
| Income (loss) before cumulative effect of change in accounting principle |  | (1,678) |  | 8,539 |  | (6,105 ) |  | 17,793 |
| Cumulative effect of change in accounting principle, net of tax benefit |  |  |  |  |  |  |  | (741) |
| Net income (loss) | \$ | (1,678) |  | 8,539 | \$ | (6,105 ) | \$ | 17,052 |
| Per basic share amounts: |  |  |  |  |  |  |  |  |
| Income (loss) before cumulative effect of change in accounting principle | \$ | (0.04 ) | \$ | 0.22 | \$ | (0.16 ) | \$ | 0.46 |
| Cumulative effect of change in accounting principle |  |  |  |  |  |  |  | (0.02 ) |
| Net income (loss) per basic share | \$ | (0.04 ) | \$ | 0.22 | \$ | (0.16 ) | \$ | 0.44 |
| Per diluted share amounts: |  |  |  |  |  |  |  |  |
| Income (loss) before cumulative effect of change in accounting principle | \$ | (0.04 ) | \$ | 0.21 | \$ | (0.16 ) | \$ | 0.44 |
| Cumulative effect of change in accounting |  |  |  |  |  |  |  | (0.02 ) |

principle

| Net income (loss) per diluted share | $\$$ | $(0.04) \$$ | 0.21 | $\$$ | $(0.16) \$$ | 0.42 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Shares used in computing basic net income | 39,014 | 38,778 | 38,969 | 38,659 |  |  |
| loss) per share |  |  |  |  |  |  |
| Shares used in computing diluted net income <br> (loss) per share | 39,014 | 40,262 | 38,969 | 40,585 |  |  |

They had $\$ 98 \mathrm{~mm}$ in cash with 40 mil shares outstanding. And if you take cash minus CL or ((\$78,423 Cash + $\$ 19,375$ ST Invs). - \$ $\$ 10,370 \mathrm{CL}$ ) = \$87,428 or approximately $98 \mathrm{~mm}-\$ 10 \mathrm{~mm}=\$ 88 \mathrm{~mm}$ or $\$ 88 / 40=\$ 2.20$ per share in net cash. The stock at this time coming into Sept 2002-there were lots of bad things going onJoel and I were talking about this before-we called it the triple witching hour.

Have you discussed tax loss selling? There is a time of the year, usually by October or at least by the end of December investors want to offset gains with losses and not have reportable taxable income. People tend to sell losers to offset their winners. (You want to find motivated or distressed sellers). That was going on in a stock that had a significant decline. Secondly, this stock was being deleted when it was trading at $\$ 1.22$ from one of the S\&P indices, the S\&P Mid-Cap index, and I think $10 \%$ to $15 \%$ of the stock was closely held by the kind of funds (like Dimensional Fund Advisors) that would automatically dispose of it with the deletion. When this stock was being deleted, it traded down to $\$ 1.22$. So that is a market cap of $\$ 49$ million dollars.

So what can go wrong? If the company burns cash, the value will decline. They could acquire somebody, but shareholders would not want it. The Enterprise Value (EV) at $\$ 1.22$ was a negative $\$ 30$ to $\$ 40$ million! You had some room in terms of a margin of safety.

Let me show you what the historical income statement looked like back then. The revenues fell from \$42 million in 2001 to about $\$ 17$ million in 2002 due to the decline in Nintendo Game Revenues. As Richard Pzena always says, "You want to find out if the problem is temporary or permanent.

Basically, I found this stock looking at a spin-off and also doing new lows list screens. Looking for EV to revenues. This will always come up. They were losing about $\$ 3$ million a quarter. There are ways you can lose money in these situations. The business could continue to lose money. You may have to shut parts of the business down, and you could have the termination costs of employees, leasing costs of manufacturing space and other costs. You may have to pay to exit the leases, so you have to look at all these potential liabilities and expenses.

I met this company before the S\&P delete. I filed a 13-G because I was not going to try to influence management or try to control the company. Although I am glad to give them a recommendation, I don't want to take control. I told that to the CFO after I filed a 13-G, and he wrote back thanking me for my support. I wrote back saying we were not buying the stock for support but because we thought that there was real value here and you guys can do something to create value here. The market is saying there is negative value here. To stay in business, one could say the shut down expenses were not high. If they shut down and went to one employee and collected the royalty checks they collected for all that they created, clearly you will create some positive value.

Getting into it was actually pretty easy for me. Their R\&D was too high. Basically, here is how I looked at it. They were like the rich guy-they made all this money on Nintendo-then they got sloppy with their other projects. They had these royalties coming in and as they were making money and the stock was going up, they would continue to take on projects maybe without the strict economic feasibility to work on all of those projects. I am sure seeing me file a 13-G on the company-and I am not a scary guy-but having me talk to them about losing control, they knew they had to do something or face their shareholders.

Between stopping spending on $\mathrm{R} \& \mathrm{D}$ and the royalties that were coming in, you would have a positive stream of cash in the future? So I think they had a discussion with themselves, and they had to re-evaluate some of their programs and look at really using discipline in how they use the cash. The $\$ 3$ million in quarterly losses is not that big a deal now but that $\$ 3$ million can turn into $\$ 6$ million loss which can turn into a $\$ 12$ million loss, etc and before you know it the margin of safety is gone. They made an announcement that they would focus on only those economic projects which had the long term returns.

Student: Did you want to have a more activist investor with you to rattle the cage and be sure to have management do the right thing?

BN: You can rattle the cage. I live in CA and getting to San Jose takes about an hour. I have been up there to visit with them. You have to count on capitalism at work. Capitalism and people acting in their own selfinterest would spur change. I think management knew the game had changed. This management had been pretty promotional; look at the market cap this company had been at. What was in their best interests? How should they behave? So I agree that you would think that they would want to do the right thing, but sometimes if they articulate that this is what they are going to do and this is how they are going to do it, the market will immediately react to what they have said and a good part of the opportunity will be gone.

I went out there on speculation thinking that they were going to behave rationally and do what was in their best interests and their shareholders best interests which ultimately would be in their interest. The company was where they were employed. If you lost a job during 2002 in Silicon Valley, the situation would be difficult. It was not like trying to get a job in 1999.

Student: Could management have cashed out a lot of their options near the highs in 1999 - 2000 and then not care as much?

BN: They could, but then you would want someone that would care. I have seen situations that were cash rich and where management could lower expenses that did not work out as well as this. Most of those companies did not have a unique product in its class, no royalty stream coming in from other things they control. This was a little bit difference.

The beauty of it was this S\&P delete. When indices are rebalanced and stocks are added and subtracted and you will know in 30 to 60 days out that this is a very likely candidate. And we just happen to be there. You dot the i's and cross the t's and wait for them to sell the stock. Sometimes you get it, sometimes you don't. Sometime you have to pay more. Would have I paid $\$ 1.40$ or $\$ 1.50$ ? I don't know. Actually, one of the negatives was that I had to file a 13-G based on $5 \%$ of the B shares. My position was 1.4 million shares, but that was not $5 \%$ of the whole company, that was $5 \%$ of the B shares.

Student: Did you buy shares before meeting management?
BN: I probably bought my first shares before I met with management. Obviously, it is a big advantage to follow something for awhile and then have the price come to you versus waking up tomorrow and seeing a stock have a big hiccup and you are starting this morning and you have to make your decision by this afternoon. I had tangentially looked at this company for a year. I had asked management when their stock was $\$ 3.50$ if they would buy back stock at $\$ 2$ ? Yes, they would. And it got there very quickly-they had a bad quarter, they were losing $\$ 0.08$ EPS, there was tax loss selling and under $\$ 5$ a lot of institutions will not be able to own the stock.

And I want to make a big picture comment about any investing. And that is you want to really focus on things when other people have to sell. You want an imbalance of sellers vs. buyers. The biggest money was made when the Resolution Trust Corporation (RTC) decided that the Savings \& Loans could not own high yield bonds. Can you imagine if you woke up tomorrow and no one with the last name from $\mathrm{A}-\mathrm{N}$ could own New York real estate what would happen to the value of NY real estate? And if you put it under a small time frame those opportunities are created a few times in your life. So, I hope it is OK to cover this in this class. But the smartest guys that I know focus on situations where everyone is focused on selling, everyone is very negative-negative sentiment is a great thing when you want to make a purchase.

One of the things that the company did in its materials and the IR web site--they would put out a line with royalties and they would put out a line without royalties. So they showed that if you took out the Nintendo 64 revenues, their royalty stream outside of Nintendo 64 was growing.

Basically royalties grew. I think the company had EBIT of $\$ 16$ million in 2004 and that cash today is approx $\$ 120$ million, and the stock went as high after the fact as $\$ 12$. The hard question today, the company is making $\$ 16$ million in EBIT and you believe the company is growing and it has $\$ 120 \mathrm{~mm}$ in cash. Does anyone want to think of a range of valuations that the market might put on this? $10 x$ to $14 x \$ 16$ million of EBIT plus $\$ 120$ $\mathrm{mm}=160+120$ to $\$ 224+\$ 120$ or $\$ 280$ to $\$ 344$. Divide by 40 mm outstanding shares $=\$ 7$ to $\$ 9$.

10 x EBIT so that is $\$ 7$ per share. The stock went to $\$ 11$. One thing I find in technology stocks, the sentiment swings particularly in small caps. The swings can be significantly greater than in large cap stocks. It is funny because the stock is at $\$ 6.60$ today. I probably sold on average at about $\$ 8.00$.

One of the great things about being a private investor and managing my own money is that I don't have to report or write letters to anybody. If I don't find anything to do that isn't great, then I wait. And I am very focused. There is a lot you can do if you are not a fiduciary. There is a big difference between how often you do things and when you pull the trigger. If you look at great gamblers, they will tell you to wait for the odds to be stacked in your favor. We could look at a lot of situations, but this is one where I thought the odds were really, really stacked in my favor. I sort of felt like tails I make a little and heads I make a lot. Those are great. And there are periods where you can find a lot of those and periods when you can find very few of those.

## Being able to sit on your hands, to me, is an important facet of investing.

Student: What do you think about today?
BN: Joel and I may disagree about this but I think-it is interesting...the opportunities....a lot of money has gone into hedge funds over the last five years and I think that a lot of hedge funds are focused........I feel like a little kid in the sand box where everyone is kicking all the sand around him. There is not as much to do. I think there is so much money chasing investments that the dislocations that we used to get are not that great, but what can happen? Basically, if hedge funds under perform large cap growth what will happen to the flow of funds? Money will be going to large cap growth. Historically people won't realize that their strategy isn't working. And I think that there is opportunity. It is great that there is opportunity in the small stuff because you can make multiples of your money, but you find an undervalued great company and you put it away. It is not as easy as this money. But I think this is not a great time for small cap value.

Bloomberg is a great tool for those of us who are addicted to it. The worst quarter MIPS had was the FY $2^{\text {nd }}$ Qtr of 2003 they lost $\$ 5 \mathrm{~mm}$ in negative operating income. I want to look at where cash bottomed out. They have a FY Ending in March. So the third quarter of 2002 cash was $\$ 97$ million and went down to $\$ 94$ to $\$ 91$ million and bottomed at $\$ 91$ million and went to $\$ 102$, $\$ 110$ and.... $\$ 116$. So they were never bleeding that badly. We didn't spend much time talking about the business, but in reality I wasn't that attracted to the business. I was attracted to the valuation and there is one thing that Professor Greenblatt will teach you is that valuation and EV is unbelievably important. The one thing that investors miss which is unbelievably important is valuation.

The other parts of the business, they were in network printers. They made programmable chips. If you are HP and you are putting out a network printer, you don't want to develop a chip for that network printer-it is hugely expensive. There is huge demand out there for chips that are programmable. Their chips went into settop boxes and HTV. In terms of understanding their business I didn't know every nook of their business, but I did check to see who was signing deals with them. You see where the products are going into to and you use your common sense. Or you consult an expert.

Student: Did you read through all the legal documents? How did you evaluate the legal risks?
$\mathbf{B N}$ : It actually is pretty simple. This is a proxy: that is why the B shares are trading at such a discount to the A shares. It doesn't make any sense. Sometimes it doesn't make sense and other times there is a reason for it.

The price discrepancy was not that great, less than $10 \%$. There really wasn't a lot of risk being long and short the same thing plus I got a short rebate. I earn interest on the short. Fed funds minus 25 to 50 bpts. There is a wide range of what you get in rebates depending on the stock—like General Motors. People were hedging the debt against the stock, so you had to pay to borrow the GM stock.

Another War story....
Joel you wanted me to cover how I screen for things.
The next company is called, Artesyn Technologies (ASTN). I really am not a technologist but I happened to pick busted technology stocks. I can't say why. The sentiment can really swing in a significant way.

## MIPS

In FY 2003 the royalties bottomed out at $\$ 16$ million and came back in 2004 at $\$ 30$ million in 2005. The bottom was at $\$ 23$ and got to $\$ 31$ mil. They stopped doing projects that didn't make economic sense. They reduced their head count where they only took on projects where they could make a decent return on capital. Sometimes you have to make a leap of faith. You have to make a leap of faith that the guy (CEO) is actually going to do that. I didn't think management would want to take my phone calls from people like me.

## ARTESYN TECHNOLOGIES



Let me give you the backdrop:
Artisan is in the business of :

## ITEM 1. Business

We provide advanced power conversion equipment and real-time subsystems to the computing, storage and communications industries. We are headquartered in Boca Raton, Florida, and are primarily engaged in the design, development, manufacture, and sale of electronic products, power supplies, power conversion products and power subsystems. We operate in two segments, Power

Conversion and Communications Products. With one of the broadest product portfolios available, our Power Conversion business offers customers a wide range of high efficiency AC/DC power supplies, as well as advanced DC/DC and isolated and non-isolated Point of Load, or POL, converters for distributed power architectures. The Communications Products business offers its customers CPU boards, WAN interfaces, and protocol software solutions that are at work on many of today's leading Teledatacom networks. Our customers include worldwide market leaders in each of their chosen market sectors such as Alcatel, Ciena, Cisco Systems, Del/ Computer, EMC, Ericsson, HewlettPackard, IBM, Lucent Technologies, Motorola, Nortel, Nokia, and Sun Microsystems. We also provide products to many other companies in the computing and communications industry and maintain a worldwide network of well-regarded distributors including Arrow Electronics and Avnet.

Founded in March, 1968 as Computer Products, Inc., we have provided components and service solutions to the electronics industry throughout our history. In late 1997, we merged with Zytec Corporation and changed our name to Artesyn Technologies, Inc. Since that time, we have focused on power conversion and single board computing solutions for the computing and telecommunications industries. We have also made several strategic acquisitions to add technologies and new products for our chosen markets and we have disposed of businesses and lines of products that were outside our chosen market focus. More recently, due to the significant downturn in demand in our end markets, we have restructured the company to ensure that our supply capacity matches market demands and that our cost structure is competitive. Despite the difficulties our end markets experienced in the last two years, we believe the industry in which we compete and the markets we have chosen to serve will provide us with significant growth opportunities for many years to come.

BN: They do things inside servers, computers and wireless infrastructure. ATSN was a darling stock that had 40 mm outstanding shares. At one time the company had a $\$ 1.6$ billion market cap. I want to show you what their sales were looking like before this.

Things were going along rather nicely from 1997 to 2000, and they had done a nice job of growing the business, nice returns. $\qquad$
The following table sets forth certain selected financial information.

| For the Fiscal Years | 2002 | 2001 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| (Dollars in Thousands |  |  |  |
| Except Per Share Data) |  |  |  |

## Results of Operations

| Sales | $\$$ | 350,829 | $\$$ | 493,968 | $\$$ | 690,083 | $\$$ | 594,155 | $\$$ | 532,392 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Net income (loss) Fixed Asset

| write-downs | $(108,822)$ | $(31,763)$ | 43,253 | 43,362 | 27,044 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Per share - basic | $(2.84)$ | $(0.83)$ | 1.15 | 1.16 | 0.70 |
| Per share - diluted | $(2.84)$ | $(0.83)$ | 1.10 | 1.11 | 0.67 |


| Financial Position |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Working capital | $\$$ | 89,025 | $\$ 152,776$ | $\$ 176,113$ | $\$$ | 127,637 | $\$$ |
| Property, plant \& equipment, net | 78,631 | 103,291 | 105,059 |  | 88,468 | 75,032 |  |
| Total assets | 303,587 | 426,483 | 497,815 | 359,050 | 325,392 |  |  |
| Long-term debt and capital lease |  |  |  |  |  |  |  |
| obligations | 69,521 | 100,399 | 73,301 | 44,154 | 50,283 |  |  |
| Total debt | 69,533 | 100,606 | 74,813 | 46,110 | 52,990 |  |  |
| Shareholders' equity | 123,446 | 219,245 | 256,512 | 199,912 | 181,088 |  |  |
| Total capitalization | 192,979 | 319,851 | 331,325 | 246,022 | 234,078 |  |  |

Financial Statistics
Selling, general and administrative expenses (includes amortization of goodwill) \$ 36,593 \$ 62,138 \$ 68,979 \$ $\quad$ 52,404 $\quad \$ \quad 54,548$

- as a \% of sales
$10.4 \% \quad 12.6 \% \quad 10.0 \% \quad 8.8 \%$ 10.2\%

Research and development

| expenses | 34,341 | 41,470 | 44,867 | 36,413 | 33,401 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| - as a \% of sales | $9.8 \%$ | $8.4 \%$ | $6.5 \%$ | $6.1 \%$ | $6.3 \%$ |
| Operating income (loss) | $(120,569)$ | $(31,945)$ | 67,139 | 64,861 | 41,981 |
|  | $(3)$ | () |  |  |  |
| - as a \% of sales | $(34.4 \%$ | $(6.5 \%$ | $9.7 \%$ | $10.9 \%$ | $7.9 \%$ |
| Total debt as a \% of total | $36.0 \%$ | $31.4 \%$ | $22.6 \%$ | $18.7 \%$ | $22.6 \%$ |
| $\quad$ capitalization | $56.3 \%$ | $45.9 \%$ | $29.2 \%$ | $23.1 \%$ | $29.3 \%$ |
| Debt to equity ratio | $(14.68)$ | $(3.77)$ | 13.42 | 21.01 | 11.06 |

## Other Data

| Capital expenditures | $\$$ | 5,230 | $\$$ | 28,763 | $\$$ | 39,256 | $\$$ | 33,359 | $\$$ | 26,795 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Depreciation and amortization | $\$$ | 77,628 | $\$$ | 33,590 | $\$$ | 26,850 | $\$$ | 19,746 | $\$$ | 16,653 |


| (includes impairment of goodwill) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Common shares outstanding (000's) | 38,389 | 38,253 | 38,282 | 37,127 | 37,882 |
| Employees | 2,366 | 2,427 | 5,227 | 4,628 | 4,290 |
| Temporary employees and contractors | 2,310 | 2,818 | 3,960 | 3,269 | 2,326 |

There were nice returns and then came 2001. So what happened? They didn’t foresee the sales-the technology slowdown. People thought growth would continue while not seeing the decline in demand. This is post the Internet bubble. Lots of companies were created who were or could be customers for networking equipment. There was a lot of money raised and a lot of capital expenditure. It really got above trend line for demand for some of this equipment.

If you look at the operating income performance here...the years from 1997 to 2000 the operating margins went from a low of $8 \%$ to a high of $11 \%$. So if you think the business will keep earning operating margins of $10 \%$, but we were not thinking that initially when I started buying the stock. We thought the company could get back to their business model once they had reached the bottom of their sales. The question was where was the bottom of their sales? This was a business that has done $\$ 700$ million so would it be $\$ 500$ or $\$ 350$ million? Were they going to be able to right the ship? I bought the stock at $\$ 5$ while I made that MIPS purchase at $\$ 1.10$, and I was buying with both hands while I was tripling down. This was something that can be very scary.

Student: You never pick the bottom. How do you make the decision as to how much capital you are willing to pour in? How much do you allocate?

BN: In this particular situation I kept going back and double checking, triple checking my facts, checking with management and really trying to understand what the plan was in how they were going to turn it around. Basically you have to look at risk/reward and sometimes the market says at $\$ 2$ you knew what the EV value was and the risk/reward. And at $\$ 1.10$ you have to say, "Am I wrong? Will this business not be able to survive?’ The way I was looking at it at $\$ 1.10$-the company going out of business was the only way I was going to lose. The good news was that buying 550,000 at $\$ 1.10$ was only about $1 / 2$ million dollars so it was not as big a position as $\$ 2.5$ million in MIPS though you do not want to lose the money.

Student: If you had found another opportunity that was compelling would you have put this much money into it?

BN: I think there is always a way to look at the opportunity sets in front of you. Look at the upside and downside. By the way, there is no better investor who understands the upside and downside as your professor, Joel Greenblatt. That is one of his greatest skills. And for some of these small stocks, you allocate capital based on what is available for you to be able to buy. This is not Microsoft. If you want to allocate money to Microsoft, you can be filled in five seconds for whatever you want allocated. In something like this, it is different.

Student: Can you give us an understanding about how you concentrate your portfolio? Your turnover?
BN: Concentration? I have had $20 \%$ + positions. In terms of turnover, today is different than the past. I am having trouble finding ideas with the same opportunity. I can find ideas that are cheap but with not the same upside potential. So I like to have dry powder for these opportunities for real outsized returns.

I have made my money in a lumpy way-some years were big and others were not. The key thing at this point is preservation of capital and not striking out at this point.

Student: Did ASTN have cash to offset the debt?
BN: Yes, they did. They went through a lot of different things. They had a bank line and they replaced it with a convertible. When the stock went from $\$ 40$ to $\$ 5$ and back to $\$ 10$ they did a convertible security (convertible at $\$ 10 /$ share) with a company in Korea that I thought would buy them. There was no near term problems. They ended up refinancing. They took out the guy from Deltec and they did a public convertible. I think they did it during 2003 when the stock was trading at the mid- $\$ 6$ 's.

I can walk through what happened. You have to be resourceful. There is a lot of judgment involved. Judgment involved with allocation of capital, judgment about the business, about the people and about the risk-there is a lot of judgment involved here. My brother happened to be best friends with the CEO of this company. I got no inside information, but I did think he was an honest man. And as you have seen in the news for the past five years...before Sarbanes-Oxley people played it a little faster and looser than they do today. I think that is an important thing to remember today.

You have to be independent. People will tell you things and just because management tells you $\mathrm{X}, \mathrm{Y}$ and Z , it doesn't mean $\mathrm{X}, \mathrm{Y}, \& \mathrm{Z}$ are true. Your job as an investor is to double and triple check it and go around this way and talk to a customer, talk to a competitor. Get on the phone and check out other points of view.

Student: How did you find this company?
BN: This was a low Enterprise Value to historical EBITDA valuation. It was on my radar screen before.
Student: What serves as the screen?
BN: I use Bloomberg. The screen is just a starting point. Basically, it identifies companies with certain characteristics to make me drill down further. The great thing about the Internet today is the ability to get information and manipulate it is greater than it has ever been.

Student: What is your preferred way to screen stocks?
BN: I screen with pretty basic criteria. A lot of times, I will look at the new low list. I want to see if there is some company that I know something about. You know I have been doing this for 25 years (since 1980). In 25 years, you probably figure one or two things and so you look at valuation metrics, you look at companies hitting new lows and you sort of have a sense of somebody who has a good business, a cyclical business. There a lots of ways to screen.

Joel Greenblatt (JG): We will have a class on how to screen, but really it is just a starting point. I will give you plenty of places to go that are not that pretty but that are cheap.

Student: How big a universe do you screen for?
BN: Well, you can cut it off by market cap or you can cut it off by country. There a lots of different ways to screen on Bloomberg. The way I look at it is: how much capital can I commit to it? And what is a 5\% position? Look at it that way to decide if that will be meaningful enough to do the further work and drill down on the potential idea. Sometimes you don't know where the idea will go. You start buying something and you don't know if it is going to get cheaper. You sort of have to have a data base of where values are--that is everything. Understanding the values of companies is a really, really valuable database to build. It is your intellectual capital.

Student: What allowed you to think that this company's sales had hit bottom?
BN: Everything was being made overseas and that China was going to kill all these companies. Everything was going to the lowest cost producer. But that is not really it. If you are in a position where you can shut down somebody's production line because they do not have a part, then you are not just a commodity producer. If you are selling to Dell-first of all they don't want to deal with thousands and thousands of vendors. So the fear was that China companies were going to take all the business. We spoke to companies
and how they like to deal with their vendors and I was not really concerned about that situation. But what this company had to do was figure where they could manufacture the cheapest and how to get out of some of their capacity.

There just wasn’t going to be the type of demand. So they took their hit. They closed down plants and facilities. They got back to their basic business that made sense. I can show you what had happened.

Sales really did fall away. The $\$ 108 \mathrm{~m}$ in net income loss in 2002 was including significant fixed asset write downs. It was not the equivalent of a cash loss. Actually they were generating cash because their receivables were going down. So what happened was that they right sized the business. And a guy filed a 13-D in the last 13 months. The company is supposedly for sale. The stock is at $\$ 9$.

Somebody asked a question before about the margin of safety-the M of S might not have been here, but the risk/reward was certainly great. Because if you believed that sales were going to bottom at $\$ 350$ million or near there and they got back to a $10 \%$ operating margin business, then you would generate $\$ 70$ cents to $\$ 80$ cents EPS pre-tax. It was not hard to see that you were going to make money. So.........

Student: Couldn’t Dell outsource?
BN: They could but Dell wants dependable people (suppliers) as outsourcers to supply them with just in time delivery. Dell could design around them, but Dell wants to outsource. Dell is an assembly and marketer. Dell wants suppliers who can provide good parts so they can assemble the computers and sell them. They are a huge marketing ship. Power-One was a similar competitor.

When Dell saw the stock trade at \$1.10, Joe McDonnell, the CEO had to go to Dell and hold their hand and tell them that he was still going to be around in two years. They did not want to give that business out. They wanted dependable goods from ATSN at a fair price and good service while they focused on what they were good at.

Student: Did you have situations where the situations deteriorated.
BN: Sure. I have had a few. The good news is that I have had a lot more winners than losers. One that comes to mine was Vlasic which was a spin off from Campbell Soup. It was highly levered. They make a lot of different food products and basically, the company was over levered and it didn't perform, and I did not evaluate it properly. I thought the assets would be worth more than they were. And it didn't work. I lost money. Leverage is a two-edged sword. It will make you a lot of money when things go right as you would know from studying enterprise value.

If you have $\$ 50 \mathrm{~mm}$ in equity and $\$ 500 \mathrm{~mm}$ in debt then a rise in value to $\$ 600 \mathrm{~mm}$ will double your equity and a drop in value to $\$ 450 \mathrm{~mm}$ will wipe you out. If it is worth $\$ 700 \mathrm{~mm}$ you will quadruple your money. So that was one of my mistakes. If I had to do it over again I might have done things a little bit differently.

## WILMINGTON, Del. Sep 13, 2005 — A federal court in Delaware Tuesday exonerated Campbel/

 Soup Co. of charges of fraud in connection with its spin-off of Vlasic Foods International.Creditors had accused the Camden, N.J., food company of packaging its money-losing lines of business into the new public company and sending it into the market with little chance of survival.
U.S. District Judge Kent Jordan ruled against them, finding that the Vlasic business was solvent at the time it hit the public market, so Campbel/ Soup isn't liable for the company's later collapse into bankruptcy.

The lawsuit was part of a continuing effort to raise money to pay creditors, mainly bondholders, who bought into a $\$ 200$ million debt offering more than a year after the Vlasic businesses were launched into a separate company.

In addition to the pickle line, Campbel/ Soup pushed its Swanson's frozen food and other businesses into the new company.

While Campbel/ Soup admitted the businesses were poor performers, those associated with Vlasic thought the company had a chance of succeeding, Jordan ruled.

According to Tuesday's ruling, Campbell Soup didn't launch Vlasic with an eye toward defrauding the company's creditors.

As part of the spin-off, Campbel/ Soup transferred $\$ 500$ million in debt to Vlasic, which wound up filing for Chapter 11 protection in January 2001.

Creditors had hoped to recover more than $\$ 544$ million from Campbell Soup in the case.

During the bankruptcy, Vlasic, Swanson and other brands were sold to Pinnacle Foods Corp. for $\$ 335$ million, while sales of other lines raised about $\$ 20$ million in additional cash.

Shares of Campbell Soup slipped 9 cents to finish Tuesday at $\$ 30.90$ on the New York Stock
Exchange. End of article.

No more questions $\qquad$
JG: As you can see Bruce really is an amazing investor. He is the guy I call to go over a situation. He has seen a lot over the years. One of the things that helps-you are all smart enough to be good investors-that there is a lot to be said about practice. I am still learning. I would say Bruce would say he is still learning. The good thing is you don't have to be Richard Pzena or Bruce Newberg but

- You do have to be very thoughtful
- You do have to do your homework
- You do have to have the right framework

I want to thank Bruce Newberg for coming. Applause...............
END

Bruce Newberg: talking to students between the break $\qquad$
BN: I think there is just too much money floating around in hedge funds. I think it is allocation of capital. Too much capital has been provided to people who do not think they can provide value added. Money has moved out of the big cap stocks. If you look at pension fund allocation and you see how much money was allocated to long/short hedge funds six years ago versus today I can guarantee that there is so much more money allocated to these different strategies. And the other thing is that more money has gone to private equity. There is more
money to fund buyouts. There is a multiplier effect for all of these different strategies that have attracted capital. But you know you go through cycles. You don't want to be involved in the markets from 1970 to 1975. There will be different cycles where this will be a great business and where it won't be a great business.

The Convertible Arbitrage market? I think that the market is ... well what you had happen in the past year: Interest rates have gone up and volatility has decreased. Typically, convertible arbitrage guys are long volatility and they are long the interest rate. So the bond forward value goes down when interest rates go up. The option portion is worth less as the volatility comes in. But if money floods out of converts, you want to go into it. Go to the area where money is flowing out of it.

Student: Do you think there has been enough of a correction?

BN: It is probably not over. The real question is what happens if we get a big move in some index? Like large cap stocks do really well and hedge fund returns under perform that by 400 to 500 basis points net? Then what will happen? Because people tend to invest in the rear view mirror. The right thing to do is think about what is going to happen though you won't always be right all the time.

## Second half of Class

JG: You might say that there is a lot of hedge fund money out there and there might not be much opportunity now. I am wasting my time. The party is over. In 1998 and 2000 and 2002/03 there were huge opportunities in small caps. That was not too long ago. Right now I think the opportunities are in the large caps. I would call the opportunities larger cap with smaller upside and better quality businesses.

I don't think the risk rewards have changed all that much, but I think the rewards will be lower but less risky. Now you have better businesses to invest in at attractive prices. You have to adjust for that.

In Bruce's example of ATSN, the did not have the pile of cash as a margin of safety but he could bet a $\$ 1$ to make $\$ 5$ or $\$ 6$ or $\$ 7$. It was a good risk/reward bet. You would take that risk/reward bet but adjust your position size based on your ability to take the hit on that. In the first bet, in MIPS, was a margin of safety bet. He fell into the situation, he assessed it and chose the risk reward bet.

Obviously, you want to work under somebody you respect. If you can I would look at it as a learning experience. Hopefully by the end of this course you will look at the world through a certain lens. This is not the only way to look at the world but it is one productive way to look at the world. I would certainly try to get myself into a position where I have some portfolio experience.

You have to screw up a bunch and learn from it. If you can value something and buy it for cheaper than it is worth it doesn't have to be a whole lot more complicated than that.

I brought this book published in 1959 and it is called, How to Profit from Special Situations in the Stock Market by Maurece Schiller. Big profits from oversubscriptions and rights offerings. My point is that people have been doing this for a long time.

I was looking in the paper today about the hedge fund manager in McDonald's. It is about a HF investor who wants to take over the real estate owned by McDonald's and then sale/lease back to free up some cash. Article below:

## Hedge-Fund Man at McDonald's Pershing Square's \$2 Billion Bet Is That the Chain Can Revamp; Time Frame Hasn't Been Fast. September 28, 2005; Page C1

In 1997, a brash, young hedge-fund manager envisioned McDonald's Corp. selling off all its restaurants to give shareholders a huge value meal. Eight years later, Bill Ackman has amassed a super-size stake in the great American icon and is salivating as he pulls up to the drive-through window.

And, yes -- he wants fries with that.

McDonald's stock has been roiled since it emerged in mid-September that Mr. Ackman's Pershing Square hedge funds had accumulated stock and options that could give his investors a $4.9 \%$ stake valued at $\$ 2$ billion. That is one of the biggest single-stock positions ever taken by a hedge fund.

Mr. Ackman sees Mickey D's as three separate businesses: a franchising operation that accounts for about 75\% of its 30,000 -plus restaurants world-wide; a restaurateur that owns and operates the rest of the outlets; and a real-estate company that owns the land beneath nearly $40 \%$ of all of them.

Back in the 1990s, he had a small stake and suggested that McDonald's spin off both its restaurants and the real-estate business. Now, he has a slightly different idea, says a person familiar with it. He still wants McDonald's to retain the crown-jewel franchise operation and to sell off a majority stake in the companyowned restaurants as a separate, publicly traded entity that would be one big McDonald's franchisee. But he wants McDonald's to keep its real estate, borrow against its untapped value and give the money to him and other shareholders.

The two businesses Mr. Ackman wants McDonald's to keep are as close to ideal as possible: They have high returns and low cost of capital, allowing it to raise money to run the business cheaply via loans and stock sales. The franchisee business charges outlet owners $4 \%$ of whatever they generate in revenue. The real-estate company gets an additional $9 \%$ to $10 \%$ in rent.

The third business isn't as good: It has low profit margins and demands huge capital spending to run the restaurants. Founder Ray Kroc originally didn't even want to own restaurants, preferring to collect all those pennies on every burger. McDonald's ownership of its own joints came later, when it was throwing off so much cash that it didn't know what else to do with it.
The real estate is just sitting on the McDonald's balance sheet without producing much cash for shareholders. Mr. Ackman values McDonald's real estate at $\$ 60$ billion, based on the cash it produces, says the person familiar with his analysis. By comparison, the entire company right now has less than $\$ 50$ billion in stockmarket value and net debt.

All this may come off to many investors as audacious, if not farfetched. Spinning off a powerful, gigantic franchisee could backfire if it decides to flex its muscles against its former owner. And adding debt to the parent would be risky, too.

But the company might actually be giving the proposals a sympathetic hearing. Mr. Ackman and McDonald's executives met after one of the company's periodic meetings with analysts and investors last week.
"We have a very high regard for McDonald’s -- the company, the brand, and the management," Mr. Ackman says in an email. "We are particularly encouraged by management's shareholder-value focused agenda. Bottom line, we're lovin' it!"
"McDonald’s is always looking for ways to further increase shareholder value," says Mary Kay Shaw, the company's vice president of investor relations, in an email.

Mr. Ackman has met with McDonald's before. In late 1997 and 1998, he presented his proposals to a McDonald's director and some executives, including Matthew Paull, now chief financial officer. McDonald's was intrigued enough to hire boutique investment firm Greenhill \& Co. to analyze the divisions' value, according to a letter Mr. Ackman wrote to his hedge-fund investors in March 1999. But the stock rose strongly on its own and the urgency to do something faded.

Since then, McDonald's has become a dramatically different company, especially in the past two years. It pulled back on its growth plans and became more shareholder-focused, cutting capital expenditures and returning money to shareholders with increased dividends and stock repurchases. It just announced it would partially spin off one of its subsidiaries, the Chipotle Mexican food chain. But these initiatives haven't made the company as efficient as possible. Buying back stock increases its ownership of everything, including the less-profitable restaurant operator.

Mr. Ackman has a track record of fast-food activism. Wendy's, in which he has a $10 \%$ stake, initially resisted his calls that the company spin off its Tim Horton's doughnut division. In that case, his position was big enough to require public disclosure, and he pressured management with public letters. Wendy's just recently took his suggestion, and its stock is up.

He hasn't taken those steps with McDonald's, a signal that he perceives management as more receptive. That may be because the stock is roughly $25 \%$ lower than where it was at its peak in the late 1990s. But the company is worth even more now: Cash flow has improved and the real-estate portfolio has appreciated. Of course that happens to be what leveraged buyout firms or potential acquirers hunt for.

That means McDonald's may have to become even more shareholder-friendly or risk becoming takeover bait. Already, Mr. Ackman's play has prompted speculation that Vornado Realty Trust, the big real-estate investment company, will make some sort of bid to get a hold of McDonald's land. Just the possibility puts pressure on McDonald's.

Mr. Ackman's proposals are reminiscent of the split that Coca-Cola underwent in 1986, when it divided its syrup business, which had astonishing profitability, from its bottling operation, which demanded heavy capital spending. That created immense shareholder value, but was, in part, built on an accounting illusion that the bottler was an independent company. Coke initially sold only $49 \%$ of the bottling operation and, effectively, still controlled it for years.

If nothing else, Mr. Ackman has pulled off a neat trick: He eked out his stake while only having $\$ 1.3$ billion under management in his funds. The stake would be too much concentration for one fund, so last month, he invited his investors to put money into a special separate fund to invest solely in a single stock, the name of which he didn't disclose initially. He raised about $\$ 250$ million in three days. Along with about $\$ 150$ million from his main fund, he bought 62 million shares and options that, if fully exercised, would bring his stake to the full $\$ 2$ billion, says a person familiar with the matter.

Critics of hedge funds deride them as vultures that swoop in for short-term feasts. But Mr. Ackman has been at this since 1997. And now we will see whether he ends up with a happy meal.

Write to Jesse Eisinger at longandshort@wsj.com ${ }^{3}$.

So there might be an opportunity to take out the cash without effecting operations. However, once you do not own the real estate anymore, you start paying market rates of rent so you have to adjust for that and see what the net gain is. So that was in the paper today.

The next article in the Wall Street Journal right under that is an article on the American Express spin-off.

## American Express Spin-off Must Prove It Can Create More Value On Its Own

## By ERICA COPULSKY Staff Reporter of THE WALL STREET JOURNAL September 28, 2005; Page C1

Throughout much of the 1990s, American Express Financial Advisors was the crown jewel of the American Express Co. empire.

At one point, the Minneapolis-based financial-planning unit contributed as much as $40 \%$ of profit while American Express struggled to revamp its sagging charge-card business and small international bank.

But more recently, the unit has been the weak link at American Express, whose signature card, travel-related services and processing businesses are highly profitable. Compounding its problems, the unit sustained a public-relations black eye when state regulators alleged that it defrauded customers by giving its advisers undisclosed incentives to push its poorly performing, in-house funds; the unit agreed to pay $\$ 7.4$ million to New Hampshire to resolve the allegations.

Now that Ameriprise Financial Inc., the new name for American Express Financial Advisors, is about to be spun off to American Express shareholders, its challenge is to convince investors that the business can create more value on its own. On Friday, AmEx shareholders are to receive one Ameriprise share for every five American Express shares they hold, and the shares will begin trading Monday on the New York Stock Exchange, using the stock symbol AMP.

Ameriprise is betting it can distinguish itself by building on the financial-planning business it helped pioneer three decades ago under the name Investors Diversified Services, before it was acquired by American Express in 1984. Ameriprise -- which manages roughly $\$ 400$ billion, has a network of more than 10,500 financial advisers and boasts 2.5 million clients -- faces competition from the likes of Fidelity Investments, Charles Schwab Corp. and Merrill Lynch \& Co. It hopes to differentiate itself by providing one-stop financial planning to affluent baby boomers approaching retirement.
"We look at a client's whole picture," Chairman and Chief Executive James Cracchiolo said. "By offering a combination of investment and insurance products, within the context of a comprehensive financial plan, we help our clients not only grow but protect their assets." Ameriprise is one of the few financial-advisory firms to offer an array of products, ranging from mutual funds to annuities to lifeinsurance products. It has more certified financial planners than any of its rivals. And it is targeting the mass affluent -- the roughly 29 million U.S. households with $\$ 100,000$ to $\$ 1$ million in assets to invest.

So far, not everyone on Wall Street is convinced. "The company hasn't been transparent with analysts and investors on the earnings breakdown between different products. This is adding to the complexity of understanding the company's story and where the return on equity improvement will likely emerge," said Nigel Dally, an insurance analyst at Morgan Stanley. Mr. Dally doesn't yet have a rating on the stock and his firm doesn't have a banking relationship with Ameriprise.

In a presentation to analysts earlier this month, Ameriprise defined its two operating units as asset accumulation, accounting for $61 \%$ of 2004 earnings, and protection, accounting for $39 \%$. But many analysts view Ameriprise as an insurance company in disguise. According to John Nadel, an analyst at Fox-Pitt, Kelton, nearly half of the earnings of the asset-accumulation business come from fixed and variable annuities, products that combine investments with insurance. Based on his analysis, insurance and annuity products generate about $70 \%$ of the company's earnings.

Wall Street already has gotten a sneak preview of how Ameriprise may be valued. On Sept. 15, Ameriprise began trading at $\$ 38.02$ in the "when-issued" market, where investors can buy and sell securities before they have been issued in the primary market. Although the stock has since fallen to $\$ 37.25$, down 50 cents yesterday at 4 p.m. in Big Board composite trading, it still appears to be a rich price relative to some analysts' estimates. Because trading has been relatively thin, some analysts argue that the current price isn't a good indication of how the stock will be valued when it begins officially trading.
"Based on our fundamental valuation work as well as the potential near-term selling pressure from American Express stockholders, we believe the stock should trade between $\$ 31$ and $\$ 34$ a share," says Mr. Nadel of FoxPitt Kelton, who doesn't yet have a rating on the stock.

One big unknown is whether investors who own big chunks of American Express stock will dump Ameriprise once they receive the shares. Currently, a large portion of American Express shares are held by growthoriented investors, who may be less inclined to own Ameriprise, which is generally expected to attract more value-oriented investors.

To be fair, AmEx's largest shareholder is one of the best-known value investors, Warren Buffett. Mr. Buffett's Berkshire Hathaway owns roughly 12\% of American Express shares and whether he intends to stick with Ameriprise after the spin-off is certain to affect Wall Street's thinking. Mr. Buffett declined to comment.

At least one potential overhang on Ameriprise shares was lifted earlier this week when Standard \& Poor's Corp. said Ameriprise would be added to its flagship S\&P 500 Index at the close of trading Sept. 30. The move eliminates the possible near-term pressure on the stock by index funds that would have been required to sell their shares. However, Ameriprise's inclusion to the S\&P 500 Index may have disappointed some investors hoping the selling pressure would enable them to buy the stock on the cheap.
"If the stock falls below $\$ 34$, then investors should want to own it because the downside in the stock is limited and the upside could be very attractive if management could execute on improving the company's return on equity," Fox-Pitt's Mr. Nadel said.

Ameriprise's return on equity is currently $9 \%$ to $10 \%$. Management is targeting a return on equity of $12 \%$ to 15\%.

To accomplish that goal, management plans to roll out new products, refocus on expanding the institutional asset-management business by investing in sales and capabilities infrastructure, and expand distribution of mutual fund and annuity products through third-party channels such as banks and brokerage firms. However, analysts say the company's future growth depends largely on whether it can continue to improve the performance of its in-house mutual funds.

While there are signs of a turnaround, money is still walking out the door. So far this year, investors have pulled $\$ 7$ billion out of American Express stock and bond mutual funds, according to AMG Data Services in Arcata, Calif. The stock and bond funds now have roughly $\$ 55.5$ billion in assets. Overall firm wide mutualfund performance has improved but isn't striking, says Russel Kinnel, a Morningstar Inc. analyst. On average, the funds did worse than $65 \%$ of similar funds over the past three years on an asset-weighted basis, according to Morningstar.

Analysts also are concerned about how the business will fare without the American Express name, one of the most highly recognized in the financial-services industry.

Despite these risks, several investors believe the stock is a good investment because there is value to extract. As Kyle Cerminara, a financial-services analyst at T. Rowe Price Group Inc., sees it: "Ameriprise is viewed as a relatively inexpensive stock that has potential for [return on equity] improvement."

## Write to Erica Copulsky at erica.copulsky@wsj.com ${ }^{1}$

Now $A X P$ is spinning off the Amer. Fin. Advisors which has been an under managed business. It also unleashes the stand alone charge card business which is a great franchise with high ROE, good market position, good growth prospects and things of that nature. So that will trade on its own. People might say, gee, everyone knows about this. It is not obscure situation.
Now I thought I would hand out more detail on the cases that were in my book. On the front are spin-offs that you can use for your cases. Your first assignment: I am expecting a one page write-up with backup. Give me the investment thesis. If you did the work and you find that the company is not cheap, then show your valuation work. I want to see the original thesis as to why you chose this company. What you find out. You will do your comparable analysis, you will do your absolute analysis of what you think earnings will be. Valuation and things like that on the back. I want to see your work. I don't want to see P/E and Price/Sales.

Part of the exercise is to get my comments back. You only have two more classes after this and then there is a vacation. Next week I will hand out some write-ups that I thought was very good.

What you have in front of you is a list of pending spin-offs. The next page is the Sear's example. Just read about Sear's and then we will discuss it.

Discussion of Sear's Spin off. Spin off of All State and Dean Witter. This idea was explained by Michael Price in Barron's. This comes out in April or May but I completely missed it despite being a special situation
guy. Sear's will spin off $80 \%$ of Dean Witter. Then the July $5^{\text {th }}$ issue of Barron's because I read an article on Michael Price.

Sear's at $\$ 54$ seems valued much too low. That $\$ 54$ includes 1 share of All State so for 1 share of Sear you get $\$ 28$ worth of All State and $\$ 15$ worth of DW so that leaves $\$ 11$ for Sears then take out $\$ 2$ or $\$ 3$ for Coldwell Banker and $\$ 3$ for Sears Mexico and it leaves $\$ 5$ for Sears. A market cap of $\$ 1.5$ billion with $\$ 27$ billion in sales. CHEAP!

There is no debt here. So you get $6 \%$ on the dollar for sales. What does a comparable look like? So I turn the page on J.C. Penny So let me compare it to another crummy retailer-J.C. Penny. JC was the closest I could find. I used the tear sheet-we didn't use the Internet in those days-and if I go through the math is trading at 60 cents on the dollar for sales.

Sears is 6 cents on sales versus J.C. Penny which is at 60 cents on the dollar of sales while also going through other comparables such as margins, earnings, etc. Everything was pretty close. This was as good a metric to use to show the disparity in prices. So what did I do next? This is all laid out for me by Michael Price.

I am looking at a ten times difference in valuation from Sears to J.C. Penny. What did you think I did next? I bought as much as I could over the next two weeks. I did this after the article after they were giving out the shares. I bought as much as I wanted at the stocks Michael Price was speaking about. I effectively created Sears for $\$ 5$ which could have been worth $\$ 50$. The gap was huge.

What happened after they spun out All State? The Sears went up to $\$ 30$ where we sold most of our stock and two months later it went to $\$ 50$. How can that be?

I missed it and Mike Price lays it all out for me and I am still able to buy it. How can that be? These are wellknown companies. There were 10 analysts who were following Sears. I am a little baffled. I guess the retail analyst does not cover insurance and brokerage companies. Things fall through the cracks.

The answer is that I don't really know. I am just telling you that it happened. You can say it is so hard. Sometimes it is and sometimes it is not. It was a special situation over ten years ago. You may claim that there are so many hedge funds today that that opportunity would not exist and that may be to some extent be true yet there have been plenty of opportunities in the past five years. American Express is doing a spin off. Maybe the spin off gets beat up. Plenty of stuff goes on. Even if the opportunities are not as glaring as this one, but there will be others. The efficient market theory says this shouldn't happen.

Comparable things were trading at J.C. Penny's level not at Sear's level.
People said I was an idiot to write the book on spin offs because then the opportunities would disappear. A year after I wrote the book, spin offs did not do particularly well in aggregate, but then the returns came back.

What I say about spin offs: It is a fertile ground to find mis-priced opportunities. Sometimes they are overpriced because too many people are following or sometimes the spin offs are under priced because of too much selling pressure. There is a dislocation and change. Weird stuff is happening. American Express will be able to trade on its own so people will see how good a business they really have.

I am pointing out the amazing dislocations you could have. A few years ago during the Internet bubble you could own 3Com, which was inclusive of Palm, at a negative $\$ 36$ dollars. For fun, we shorted Palm against 3Com.

Questions? I don't have any answers but to say stuff happens and it is worthwhile to look. We don't own any Wal-Mart but we are looking. People ask me when they should buy spin offs. Should you wait two months, should you buy right away? I don't use a formula. I analyze each situation independently. Luckily there is no magic formula.

Perhaps the company being spun off is small so the institutions won't want it. The large caps have not moved in 5 to 7 years but the earnings have moved up.

Our worst years were 1998 to 1999 then we made $100 \%$ in 2000. When things look obvious, things happen.
Look at the application on the value investors club for things you should present.
Go to page 12 Viacom's purchase of Paramount Communications. Basically, the winner of the bid ran out of money so Viacom offered lots of paper to its shareholders as payment.

So if you are an institutional investor and you get all this stuff what do you think is going to happen when you get this? You will sell it. Institutional investors won't pay read about Contingent Value Rights (CVRs). There will be a fire sale. I hadn't seen a CVR or what the warrants were.

Diagram the combinations of values you can obtain.
We have a three year warrant struck at $\$ 6$. They had borrowed a ton of money so the equity stake of Viacom was like a leveraged buy out. There is a lot of leverage here so these warrants may be worth something.

The exchangeable convertible debentures are basically junk but they were worth 60 cents on the dollar but I can use them as money to buy something of worth. I had to come up with $\$ 70$ worth of debentures. $\$ 70 \mathrm{x}$ $0.60=\$ 42$ for five year warrants. I lowered my cost by $40 \%$. These subordinated debentures have over $\$ 1$ billion in face value.

Making the debentures available for the warrants made the warrants more valuable. Viacom simply ran out of money so they created exchangeable paper.

Any time you see anything remotely complicated try to take the big picture view of it. The market looked at Viacom as if it way overpaid for Paramount. The way I looked at it was like this:

They only paid half of it in cash and the rest of it with junk. If they didn't lay out cash then I don't care if they overpaid from a credit worthy standpoint. The rest they paid in junk. I was next in line.

I also made a lot of money in MGM because Turner paid half in cash and half in paper. He bought a film library so he had low programming costs.

## Next we will look at Host-Marriot.

The big picture here: No one likes the over levered Host Marriot. What I thought was potentially attractive: there is $\$ 400$ million in equity with $\$ 2.6$ billion in debt so $\$ 3$ billion in value. The debt was non-recourse to the parent. Of the $\$ 400$ million in debt $\$ 300$ million was only on the San. Francisco Marriot. $\$ 2$ billion guaranteed by the subsidiary and not the parent.
\$700 million - $\$ 100$ debt $=\$ 600$ million.

This was a good risk reward. This was a leveraged bet. \$4 per share for Host but worth $\$ 6$ per share of the Parent. There is nothing you can learn at school that says to go look at this stuff. This was a good risk reward where I lay out $\$ 4$ for 6 value with no debt and some upside.

I don't have to get to that point where I do a lot of work. If I have a thesis and it keeps holding up, you keep going or if not then drop it. I don't care what I don't do but what I actually do do. You wait for your pitch.

The good thing about working for yourself is that you can sit on your hands.
The valuation work is never wasted. The broader your circle of competence from doing different industries the better. The key is doing good valuation work and having the discipline. The key is what context to look at the world. What matters is doing well what you do. I don't care about what I missed.

Next week, read the Buffett stuff. Read his letters. The next Friday or the following Friday we will have a guest speaker. END

November 08, 2005
Project for Oct. $16^{\text {th }}$-choose one of these companies. These companies have not been chosen randomly. All are interesting.

| RCII | TBL | COLM |
| :---: | :---: | :---: |
| LXK | KCP | DPZ |
| IPG | CECO | EFD |
| PFE | KSWS | ABES |
| MAT | KG | KND |
| UST | MVL | LIZ |
| AEOS | NCOG | PETC |
| FL | OVTI | PGI |
| FOSL | TPX | WGO |
| GPS | INSP | COCO |

Track 17: Joel Greenblatt: I want to go over your papers. In general for a first attempt they were very good. I guess big, big picture, I would like a more concise pitch.

I read an article about Bill Miller who runs the Legg Mason funds, and he has done tremendously and he has beaten the market for the last 14 or 15 years. He is an interesting value investor but they run billions and billions of dollars.

He wants a pitch very concise and fast. It helps you if you can summarize your pitch very quickly. This company is trading -it is out of favor now; it is earning less money but if you look at normalized earnings it is trading at 5 times normalized earnings and ROIC are $50 \%$, they are closing their money losing division so that is why people don't see it. People see it this way and that is why it will get better. You should be able to say it.

You should be able to spit out the pitch and the valuation portion of why you think it is cheap in a few lines but then I want to see the back up. It is just very good practice for you to understand why you are or are not buying something. Or this is what I thought and this is how it turned out. It is a little harder when you are assigned something because you might not have a strong pitch on it. It looks fairly priced. I went through normalized earnings it comes out within the range of fairness. Or I can't predict what normalized is. I you can pick BBI (Blockbuster) and say I don't know where earnings are going to be so I have to stay away. Here are three scenarios and if it hits this one, I am going to lose a lot of money and I don't have a lot of confidence which one is going to hit yet.

In answer to the question which was asked of Brian, by the way, which is: "How do you value a company whose earnings are going to drop off a cliff in three years, five years or whatever? It is really nothing more than a discounted cash flow question. You make your assumptions about future cash flows and if you can buy it at half of all the cash you would collect, then you would buy it. It is not a Warren Buffett pick but it is a way to make money if you think you will collect that money. It is not super complicated-you are trying to figure out the thing you are buying-what is it worth and pay a lot less for it. That is what you are trying to do.

The way I answer most questions is that if I can't figure it out then I say I don't know. Then I have no business investing in that.

Student: How would you think about the terminal value used for BBI?

JG: You know what? Me personally, I would not get that complicated. What are they going to earn in year 1, year $2, \ldots \ldots$. Year 8 and then figure out what that is worth to me. If I pay $\$ 5$ now will I get $\$ 10$ within 8 years. $\$$ of the dollars could be next year and the following year I would receive \$1. If I can make an IRR (internal rate of return) on the money I have invested that might look pretty good. A. who cares what I make in year 9 because it will be next to nothing based on my assumptions. I am not looking for exact answers. I am looking for-hey, I think it is going to be worth $\$ 10$ and it is trading $\$ 5$ to $\$ 6$. I think that is a pretty good bet there.

Eric's presentation on Risk Arbitrage. Does anyone have any questions? I think many have misconceptions over what I wrote in the book. Don't try this at home. Not that it isn't a bad place to be but it isn't for amateurs who don't do a lot of work.

What Eric said is that spreads are so thin. Traders are investing in situations with $8 \%$ annualized returns or just above the risk free rate. I never looked at the business that way. And I think that is the flaw. I look at it as a risk reward business. I can make a dollar but I can lose $\$ 10$ and all this happens in three months. A lot of people set it up as an annualized return business. One annualized return can be a lot better where you make ten and lose a dollar.

People look at it the wrong way which was always my complaint. There is too much money chasing returns. I don't think it is particularly relevant right now because plain vanilla arbitrage is not too good. There are always interesting things when something is changing. Brian just went through the takeover battle for Hollywood. There was a $\$ 14$ bid and it went down to $\$ 10.25$, that is an interesting one to think about. If you have a strong valuation opinion and you understand how takeovers work, there is a lot of back of forth and game theory involved as the buyer tries to get a cheap price. What are the incentives here? The CEO is not trying too hard for them to cut the price and they still are interested. They didn't walk away because the business is going nowhere. They probably wouldn't show up again.

Track 18: There is a lot of stuff going on there, so it is still fertile ground. And we talked about merger securities to look at sometimes there is overbidding or management is trying to take it private. There is a chance to make money along the way. I am not saying ignore this are completely. I am saying it is its own special area. I originally did not write that book for MBAs. I hadn't taught MBAs yet. I wrote the book for MBA level readers but I had been doing it for 15 years so I didn't realize that. I really meant for lay people.

## Comments on Students papers

This is in no particular order, I just went through the papers and made comments. Don't take it personally.
I bunch of people slapped on a bunch of 12 x EBIT numbers. I would not do that lightly; it has to be a pretty good business to trade at $12 \times$ EBIT and people threw out pretty high numbers. Well, it is trading at half that. That might be, but that is a pretty high number. We talked about $10 \times$ EBIT with a $40 \%$ take rate is $6 \%$ aftertax return that is a pretty good business to trade off for a government guaranteed bond. To take $12 \times$ EBIT you would want to be pretty certain of the business and the growth. I wouldn't throw those numbers around so lightly. There are certain business that are worth that or more than that but it ain't cheap!

Once again if it is tough to know what normalized earnings are, the best thing is move on to something you can analyze. If you can't analyze normalize earnings then you don't have a clue.

## How to Make Presentations to Portfolio Managers by Bill Miller, PM of Legg Mason

BM: I want to emphasize in your presentations that if you go into capital markets, you will realize that portfolio managers have ultra-short attention spans. And there is basically no successful portfolio manager of my acquaintance who has ever wanted to hear a story longer than ninety (90) seconds. Peter Lynch, when a senior analyst came into a pitch him a stock, would turn on an egg timer for 90 seconds. The analyst had to complete the presentation within 90 seconds and be out of there.

If you can't get the portfolio manager's attention within that time with a convincing case then they will assume that you either don't have a convincing case or you are not able to articulate it, and you should go back and figure it out.

## Stories not Atoms

The world is made of stories, not of atoms. Most people think of the world as analyzing atoms and its constituent parts, and then I am going to figure out how to value it and then describe it. The alternative way to think about it is to construct a convincing story. Take all your material together and construct a convincing story.

If you speak to a portfolio manager, the best thing to say is, "I want to talk to you about Homestore (HOM). It is at $\$ 2.25$. The 52 -week range is $\$ 4$ to $\$ 2$ and the all time high was $\$ 100$ in 2000. I think it is a buy for the following five reasons:

1. Bam
2. Bam
3. Bam
4. Bam
5. Bam

The stock is trading a $\$ 2$ and change. I think it is worth $\$ 6$ or $\$ 8$ or whatever. Here is why I think it is worth that. Here are the risks. Then you are done.

In the presentations: no more than five positive points and three negative points. What is it worth and then you are done.

## Greenblatt Class \#8

November 08, 2005
Hopefully you will read the Magic Formula book for next Class

## Linda Greenblatt Presentation on investing in retail stocks.

Joel Greenblatt ("JG"): Before she speaks, just to give you a context, Linda sticks to one area: consumer products and retail. She has been in that area for 10 years and has averaged high 20 's percent returns staying in that little niche that she knows well. She finds enough opportunities in that one area. Her returns have been no more volatile than other concentrated investors. She has phenomenal returns focusing on what she knows. There is a great lesson for you. It doesn't have to be retail but an industry that you understand. She picked something she really enjoys--that is a very important lesson.

A number of people have come up to me before class and said they will join a big firm and they are afraid they will be pigeon holed. That may be true but to really learn an area very well and still be very profitable. As you invest over a long period of time you will come to know more areas. Knowing one area well is tremendous.

She will talk about areas she is working on. $\qquad$

## What is a girl from Long Island doing in retail?

Linda Greenblatt ("LG"): So what is a girl from Long Island doing in retail? Pick an area that you can know and that you can understand well and that you enjoy. I like shopping. It is definitely an area I have to come to know well. You start to see patterns. Over a ten-year period you learn how a particular industry group trades that gives you a big advantage over people who are first looking at the stock and coming in cold and not having the background.

I like retail because you are constantly getting information. You get it on a monthly basis and sometimes on a weekly basis. Retailers put out same store sales numbers-Comparable sales in stores for a year-over-year period. Monthly basis but most industry groups you normally get quarterly numbers. The more information you have, the more people try to trade on the information before, after and during. You get a tremendous volatility in this sector. A lot of people don’t like volatility. As far as I am concerned, I can live with volatility if there is a good opportunity over the long term. And if I am taking a two years time horizon that is actually my greatest opportunity--are these monthly numbers.

Inevitably these companies are going to miss because of their fault or no fault of their own due to the macro environment. There will be a missed number and the market tends to have no mercy. So the market kills these stocks. One day it is trading at 20 times and the next day it is trading 10 times (earnings) but nothing has fundamentally has changed. That fundamentally is your opportunity. So you must live with a little bit the anxiety. Believe me when these stocks are down $30 \%$ to $40 \%$ it is hard to pull the trigger, but that is usually the best time to buy. Volatility is your friend.

I don't know how to pick the next trend. I really don't know fashion. I say this: nobody can predict fashion. It is really is not about hitting the next trend on a continuous basis. Are these companies running a good business over the long-term? Are they running a business that can weather the ups and downs?

The best time to get in is when they missed a season of merchandise because if you look at the fundamentals of the company and it is well-run and the stock gets crushed because they miss a season of merchandise, then it is an opportunity to own for the long term. It is really irrelevant if they pick the hot trends or not.

It is very interesting because the Street misses the point on retail. Most analyst reports focus on how this company will do in Oct? How will this company be affected by Katrina or higher heating prices for Christmas? These are all relevant questions, but not relevant if this is a good business. Fundamentally it will be around. If you buy it at the right price it really doesn't matter what is happening to the customer today because they will be around and they will continue to buy.

A quote from Fortune last year from a Hedge Fund manager who often invests in retail, "I have my people visit stores to see how much the items are marked down or if there are long lines at the register and I buy if this company will beat numbers and short it if it misses numbers. It is that simple.

He really misses the point. It is not that simple. If I had to invest that way, I would lose sleep over whether I could consistently do that. Maybe I would get it right only $50 \%$ of the time. I would have a lot of anxiety in between. If you can take a longer time horizon for one to two years. You have to buy these things when people hate it because that, obviously, is when your opportunities are available. So you have to be a contrarian.

Can you see my slide: This is a price chart of AEOS, American Outfitters.


Here is the two year price chart, it was up then down. So the first thing you notice there is a lot of money to make in this stock. Two years ago it traded at $\$ 7.5$. Here at $\$ 10$, they had $\$ 3$ to $\$ 4$ dollars of cash on the balance sheet, you knew they were not going under. Yes, they missed sales-is anybody familiar with this story?
Basically they were off-trend for a while. They were not sure how to position themselves in the marketplace. They tried to compete against (Abercrombie, ANF but they didn't have the cache. Back in 2004 they were not addressing their customer-the fickle teenager. Back in 2003/2004 they were missing the boat with their customer; they were not meeting their needs.

Fast forward six months, they got their inventory under control and they turned their merchandise around. Comparable store sales turned around that was key. Back in 2004 it wasn't that their earnings potential was any less than six months later, it was the fact that comps (comparable same store sales) were negative. This company doesn't deserve this multiple because they are showing negative comps so it should trade at six times potential earnings net of cash. To me this is a company that will be around. They have a healthy balance sheet. Yes, they have merchandise misses; yes their same stores sales are down. But they are making changes to their management team; they are on top of their inventories. They got hit on inventories in 2004. Certainly there is potential there.

As soon as people as people saw comps stabilizing and they recognize that they could get back to more normalized earnings and margins, the stock basically tripled. This is one example how you can make money in retail if you get in at the right time.

## Next Chart: ANF:

Does anyone know the story here? Basically the same thing happened. Comps were negative for awhile; there were merchandise misses, they tweaked their management team. Back in their 2003/2004 area, despite the fact that they had a strong balance sheet and strong customer base, the stock was depressed. ANF has a loyal following and they were not going away. If they could just stabilize their margins. Again, they had the highest margins in the business; they had the best ROC in the business-a solidly run business. The one caveat was that their comps were negative. That is why people knocked the stock down to those levels. The stock was basically a triple from December of 2003 to July of 2005-the stock went from $\$ 25$ to $\$ 75$.

JG: By the way, Linda was here in class touting these stocks at the lower prices.


## Aeropostale

Anybody know a little bit about this company? Anyone been into an $A R O$ store? Have you ever not bought something on sale? If they mark something at $\$ 30$ it immediately has $20 \%$ off. You immediately feel like you are getting a bargain. That is certainly different from what ANF is trying to do. Most retailers are only taking their mark downs when they have too. If you see people not buying, I am not going to buy too.

We want our customers to feel like they are getting a bargain. Their price points are about $30 \%$ lower than Eagle and Eagle is about 30\% lower than ANR. It positions them very well in the marketplace. There is certainly a place for them in the marketplace so they are not going head to head with the other guys. This is a one year stock chart. The stock was as low at $\$ 18.5$ last week and as high as $\$ 35$ a few months ago. Perhaps there is an opportunity here. Around $\$ 18$ was where we were buying it.


We are going to build out their store base and figure out what we think it is worth in a three-to-five year period. We want to figure out a price target of our own.

So obviously, what got me interested was the precipitous fall in the stock price. It certainly made me take a second look. And I knew estimates had been in the two dollar earnings range with $\$ 3$ in cash so $\$ 15$ and potential for $\$ 2$ EPS gives you 7.5 xs . The stock seems pretty interesting; I want to do more work.

What happened for the decline to have occurred: They missed their comp sales, their merchandise was slightly off; inventories were up $33 \%$ per sq foot while same store sales were down $2 \%$ so they were over inventoried, it will probably take them a few months (not a one quarter problem) to clear out the inventory. So they were having big sales to get rid of stale inventories to bring in fresh inventories so margins get crushed in the interim fire sales. It is a very stable company. They will get their merchandise back on track. They just needed time to weather the storm. A company with heavy debt that misses several merchandising seasons could go bust. The wheels are in motion, management issues--if there are any--are being addressed and inventory issues are addressed. I would rather see you take a hit and get your inventory problems behind you rather than stretch their problems out over a year.

They started to have these issues and everyone piles onto the band wagon (investors sell immediately; all the analysts downgrade the stock). You can't own it here because the problems will carry over into the next quarter. The majority of analysts either have holds on it or sales on it. Nobody wants to get ahead of themselves. They see that this will be a problem for a quarter or two so they don't want to go out on a limb and predict a turnaround no matter how cheap the company becomes. They can't predict over the next few months, but as you know, it is irrelevant what same store sales are going to be. Because what is relevant is if this company gets past these issues, can the company be back to normalized margins and earnings and when they do, what is this company worth?

JG: Stop Linda right here and look at that chart and say isn't it great that the world works like that. (Stock chart shows a collapse from $\$ 35$ to $\$ 18$ ). Linda has been making money all these years and that is what the chart looks like every time.

LG: You don't want to listen to the sell-side analysts. Analyst: At $\$ 19$ we are underweighting $A R O$ because they will continue to miss estimates ("sell" it at the lows or buy high and sell low) because they have too much inventory (no kidding). Those trends will likely continue into spring (Jan-Feb). Maybe so, but we are taking a one to two year time horizon. We don't care what happens into spring, we care about what happens when they get through these issues.
"We think it makes sense to underweight stocks with earnings momentum slowing." I think that is exactly the wrong way to think. Downside earnings miss. It is the wrong way to think about things. The time to buy is when everybody knows they are missing comps, have inv issues, etc. You know what, if she knows it, then everyone knows it. This is the time you have to be looking at it and thinking like a contrarian.

JG: She has always has done it that way, she is going to keep doing it that way.
LG: Pulled off the Bloomberg. Earnings were supposed to be $\$ 1.65$ range and the number for next year was supposed to be in the $\$ 2$ range. This is now: earnings came down to $\$ 1.36$ for the year and they took earning down to $\$ 1.70$ for the following year. Why did they take the following year's earnings down? It makes no sense. They can't keep their estimates for next year the same if they lower this year's earnings. They automatically bring next year's estimate down regardless of the business. Could the business do $\$ 2$ next year? Of course, they could. I think there is a really good chance to make $\$ 2$. Per share once they get through their inventory issues.

The fact that they numbers come down means that you shouldn't be fooled that something has fundamentally changed with the business that is causing numbers to come down for next year.

Student: What do you do to differentiate among management teams?

LG: Management--I like to see someone who has been around for awhile. I like to see a proven management team. As I do more research, I look at: Who is their customer base? Who are their competitors? Is there a reason for their being? Is there a reason people shop at this store vs. their competitors? Yes, because of price. $A R O$ will win on price. There is a reason for their being. They are competing with the discounters and there are not many other specialty store concepts in the malls that are competing directly with them. This is the price point they are looking to.
Student: Why didn't you look at American Eagle as an investment? They both are way off of their highs, they both are well run and they have a reason for being.

LG: It is interesting because those are exactly the two companies I was looking at to add to the portfolio. I looked at Eagle and you are right on all counts but the one major difference was that $A R O$ is a six hundred store chain and they have more potential to grow to 1000 to 1200 store with their concepts like Jimmy's. The growth potential is tremendous. I look at that an American Eagle that is fully saturated at 900 stores. Perhaps they can open another 100 stores. I believe growth will be better with ARO. It will be a few years before Eagle has any growth potential. AEOS can open a new concept but it will take a year for a test phase and a few more years to get momentum. I like $A R O$ primarily for that. $A R O$ was a little bit less a fashion concept than a fashion follower. I like that position a little better. ARO doesn't have to be in the lead on fashions, they can be a step behind.


Student: What about falling same store sales?
LG: Same store sales falling and growth in stores? It really depends upon the issues. They didn't have much top line growth but margin growth, then that might be of interest. I don't necessarily have to see $15 \%$ to $20 \%$ top line growth depending upon the situation.

You want to understand why the SSS are declining. Ask how the company is addressing the problem or if they are addressing it. If management is blaming it on the weather, oil prices etc. I like companies that take the blame and take responsibility to fix the problem. You know what, there are some macro issues but we have a plan to fix our issues.
Student: How do you know when a retail concept is reaching saturation?
LG: It depends upon whom they are catering to: what malls are they in: ABC Malls. You could see an AEOS in an A or B or C mall. A 1000 to 1200 is max saturation for a retailer to go into all three mall types.

An ANF will max out at 400 malls because they are only in A type malls. You won't see them in a C mall. That is why they launched the Hollister concept which was for lower quality malls: B and C.

Student: Whom do you talk to when doing your research?
JG: I will talk to anyone who will talk to me. I will talk to store managers because they often know a lot. I try to talk to senior managers. You will get different information from a senior merchandising manager than a CFO.

We talk to people who come out of the store with or without bags. We speak to store employees. It depends upon what we are trying to find out at the time. When looking into $A R O$ we wanted to see a loyal customer base. Are customers coming in and not buying? What do they think of the merchandise? Are the customers still coming in despite the weak merchandise? One of the basic things we try to understand is what is happening to their customer base during this period of time when they have these merchandising missteps. You go in with a thesis on the stock. Why is the stock cheap? You go in and try to delve further.

The nice thing about retailers is that you have more access to their customers. Again, the more information the better. I go the malls, my partner and a person in her twenties who spends a lot of time in the malls-we all go to the malls to check out stores.

I send my mother or anyone who I know is a potential customer to the store. Everybody has a valid opinion when it comes to retail. We are based on the East Coast so certainly we have a very warped perspective of the world. It is important to be careful not to extrapolate from the East Coast to the whole country. If you are out doing that qualitative research you focus on the entire area not just one area.

Student: What about macro issues that can hurt retailers?
LG: When it is a cheap retailer like this, this is the customer who will be hit the hardest because of the high oil prices, but on the other side, the customer who used to shop at Eagle will now shop at ARO because they have less money. I do not spend too much time on spending trends.

I try to avoid the macro stuff. Do I think the news of the Macro economy is out there already in the market. Do I think that every article I have read for the past four months is already in the market? Yes.

I ask whether this is a cheap stock today and do I think over the next two years there will there be a normal environment.
Student: Do you short stocks?

LG: Sometimes I short. I prefer to short more of a basket than a particular stock. These stocks can go to even more ridiculous valuations on the upside. I don't have the two-year stomach to wait for a stock to drop like I do for the long side.

If I do see a company posting double digit comps for several months in a row and it is trading at 50 times earnings, do I think it is sustainable? No. I don't know when it is going to turn but I know it is unsustainable. You know the day will come. Reversion to the mean.

Student: How do you value growth?
LG: Here is a quick look at the numbers to say this stock looks cheap, so perhaps we want to do more work on it. If you notice it's EV to EBIT is 8 times but this is year coming off of depressed margins because they messed up on merchandise. So that 8.5 EV/EBIT is not that relevant. You really want to look out a year. That EV to EBIT is not really that relevant either. People took down their numbers not because the business is changed but because they got hurt this year.

I like to put together my own numbers for next year. My own numbers show EV to EBIT of 6 times so it looks pretty cheap so I want to do more work.

Slides:

This slide is on store potential: It looks pretty exciting for $A R O$. Just some Easy numbers to calculate for why the stock looks pretty cheap to me. Those P/Es are not net of cash so net of cash they are even cheaper so that is interesting. You asked about growth.
$A R O$ with the potential for another 400 stores and the other, Jimmy concept could be 800 stores. I was more conserve with 600 stores, but there is a lot of store potential there.
Here is a situation where people are looking at this year's numbers and they are really focusing on that operating margin number of $10.8 \%$--under pressure. The analysts write that the margins are really under pressure; we hesitate to recommend it until the get back to better margins (investing in the rear view mirror). It wasn't that long ago that the company did north of $14 \%$ in margins. It wasn't that long ago the company did north of $14 \%$. I believe the company can do $13 \%$ while the street is at $11.5 \%$. Is it difficult for them to get back to $14 \%$ op margins considering nothing in their business has changed in the way they run their business? This says to me, Wow, there is 400 basis point of operating margin improvement in operating margin here.

They have big room for improvement $11.5 \%$ to $14 \%$. You need to look at normalized margins not depressed margins. If I look at norm in the $13 \%$ area because they did $14.5 \%$ last year. That This leads me to a valuation of the stock. But the point being is that I see $10.7 \%$ operating margin with potential to go to $14 \%$, so there is upside here. I get excited. Most people say, "the stock is $10.7 \%$ margins, I am going to knock it down."

There is huge potential upside here from 10.5 margin to 14.5 margin.
LG: You like to see that has experience opening a large number of stores in a year. Typically you don't want to see a company go from 100 to 500 stores in a year, the risk is high. You want to be sure that they have a good model, they can format the store, they know what their customer is looking for, and they are earning attractive ROICs. As they gain confidence then the store opening can accelerate.

JG: A new store may not do as well as a more mature store. If the company has poor merchandising then it doesn't matter if they open many stores or not to help ROC. Ask if there are too many stores opening (saturation) or something else is going on.

I always want to discount their expansion. What is a fair discount for growth? I try to be very conservative on my terminal value.

Be aware that the quality of merchandising may affect same store sales more than the number of stores opening or the company being close to a saturation point.

New Slide:
JG: This slide is a little confusing, but it helps you come up with a thesis as to when the stock is cheap; where you want to buy. I try to take a look out over a five year period and place a terminal valuation on the stock over that five year period
2.2 billion for arrow with pot for 400 another 1.4 billion Sq ft Jimmy’s currently only has 8 stores, Now, this is a sit where they are in a test mode and they will continuye to test for another 6 mos. When I make may assumptions, I want to be very conservative. So I assume they test for another two years, then they slowly open 50 stores a year.

If you look at how Arrow opened their store base, once they has their concept down, they opened 100 stores a year. These are conservative estimates. My assumptions are not aggressive in terms of how I do my valuation.

Over next five years they have 2.2 billion Sq. and 2 bil sq fot potential. Arrow doing $\$ 525$ a square foot. That is the number I am using for the additional store openings. I am not assuming big things for comps again.

Jimmy's not as prod as Arrow. They are doing $\$ 400$ per sq ft for their category which is more in line with retailers that compete in their category. Jimmy's is catering to 18 to 25 year old customer. You can take a look at competitors to get the numbers.

What is the potent earnings power over that five year period? Normal margins—peak margins were $14.6 \%$. Mind you that the company believes it has the pot to do north of that. I assume a $13 \%$ margin which I believe is a normalized margin, certainly in line with other retailers and well below what the company thinks it can do.

They are earning $\$ 1.63$ on $13 \%$ margin and $\$ 1.42$ with additional margins. If the Arrow can do a $13 \%$ margins and Jimmy's doing a higher margins- Earnings over that five years is \$3.05 and place a low 12 multiple (based on conservative assumptions). Jimmy has the potential to open 800 stores but they will only have 150 stores opened by the end of five years.

Then the build up of cash over the five years. $\$ 110$ then adds back depreciation and subtracts maintenance capex and it gets you to $\$ 8$ per share in cash and there is $\$ 3$ in cash today for a total of $\$ 11$ per share in cash. I am assuming that management does not pay dividend or buy back stock, they just sit on their cash. Here you have $\$ 37$ plus $\$ 11$ gets you to $\$ 45$ stock price at the end of a 5 year period. If you remember Arrow's stock chart, basically you had a month and a half to buy at $\$ 20$ or under to buy this stock. If you had done these calculations, you have a return of $19 \%$ over the next five years. That is one way to look at it.

JG: Right. The way we talk about is that when everyone figures out what Arrow will earn and it could be a $\$ 48$ stock, you could have the stock revalued faster and within two years you could have a $\$ 48$ stock. Other investors could discount that back at $10 \%$ since that is a normal return of what you expect to get from a stock. The stock could be at $\$ 36$ within two years which is an $80 \%$ return. Though Linda presents the return as $19 \%$ annualized over five years, when most people start to figure it out, you could get a big chunk of your upside in the next two or three years.

I just want to make another important point that Linda made-she built out her store base. In other words, most people say, "Well, they are growing their stores at X percent and it deserves that P/E or that P/E—people just pick numbers out of the sky based on a growth rate that will be short-term. Whatever the growth rate may be, people just pick-I don't know what they do. But what Linda does is just so logical. She builds out the whole concept; it makes sense. She used conservative margins and store openings. She built up the new concept by only $20 \%$ of the potential but she still comes up with huge numbers. So this exercise is figuring out what it is worth and being super conservative. If there is a big gap between what it is worth and what you are paying, then you have something that is pretty good.

LG: Another way I look at it is that if the company can get to that $\$ 2$ in earnings run rate over the next couple of years, then other investors once they get off same store sales and onto earnings and then they look at square footage growth and say, "Oh, they are growing at $15 \%$ to $20 \%$ so this company deserves a $15 x$ to $20 x$ multiple, so you have a $\$ 30$ to $\$ 40$ stock over the next two years. The bottom line is that I am not including what I could have put in additional assumptions which would imply a more aggressive upside for the new concept of Jimmy's which includes a more aggressive roll-out of the stores. They could have 500 stores at the end of the five years not just 150 stores like I mentioned in my assumptions. I am assuming a flattish pick-up of same store sales, but they could do better. They do a stock buy back and the margin performance is doing better than that $13 \%$. The company takes steps to improve the margins beyond $14 \%$.

Student: What are the ROIC's on the stores? What type of return do mall based stores typically have?
JG: You probably should figure out what the inventory will be.
LG: This has $20 \%$ after tax ROIC, so it is very good.
Student: How did you figure out $\$ 20$ million per year for capex?
JG: They break out the capex for stores then I multiply by the new stores they open per year-that is how I reach that number. In terms of MCX, it varies.

What are the assumptions or the things that could happen in a good way which I am not including? I am very conservative.

Student: Mr. Market rewarding you faster, then so you sell?

LG: I would exit if the price was revalued much faster than my five year estimates. I have yet to sell a stock at its peak.

## END

Next week you have your $2^{\text {nd }}$ project due.
Assume we are in the $1^{\text {st }}$ qtr of 1996 for Munsingwear.

Class \#9 November 16, 2005
Skip Benewitz (SP) from Kirkwood Capital is here to ask you questions about your presentations.
Your assignment is to read my book (The "Little Book") for next class.
The exam will be a test of your valuation skills. The one thing about the final is that I generally keep them so when someone asks me about you; I can see the results of your exam.

## STUDENT PRESENTATIONS

Student Presentation on Timberland (TBL):


Students: A $\$ 2$ billion Mkt. Cap Company manufacturing and selling active wear and footwear. 7.7 EV/EBIT and 59\% ROIC.

Joel Greenblatt (JG): Did you use EBITA minus MCX for your proxy for EBIT?
Student: We see it cheap for a number of reasons: Negative sentiment. Miscues in product rollouts
We believe there is a $25 \%$ upside today and $50 \%$ in two years. On a net basis for $24 \%$ and if you hold it more than two years you have a $50 \%$ return.

Take the current multiple ....

They have no debt and strong cash flow. They have profitable investment opportunities. They are growing. Every dollar they put back into the business, they earn $40 \%$ on capital.

The management team is solid. They are fully vested. They have announced a stock buy back. How many shares outstanding? $\$ 68$ million. Shareholder friendly management. Corporate responsibility is good. Human rights are one of their concerns.

Risks: Not getting the fashion trends right. Risk is mostly in the US business.
Calculating Enterprise Value (EV): Timberland has no debt and \$100 million in cash.
Calculating Excess Cash for Enterprise Value (EV)
JG: One of the points that always come out is do you subtract (all) cash? The answer is no; you subtract "excess" cash (cash that is not needed to run their business on a yearly basis). You have to decide whether any of that cash is needed. Negative working capital businesses (like McDonald's Restaurants where customers pay cash or credit card while payables are 30//60/90 days) usually have the total amount of excess cash on the balance sheet excepting, of course, for petty cash in the registers.

Remember that retailers need to keep cash in their registers all the time, so do not subtract the full amount of cash on the balance sheet.

Competitors: Wolverine.
They have a loyal following of customers-construction workers.
The multiples and the margins-we took them down from where they have been. There peer group is trading at 11 x EV/EBIT. This is trading at 10 x EV/EBIT. $50 \%$ return if you hold it for two years and you get 10x EV/EBIT on an exit or sale.

JG: How about on an absolute basis? How do you justify that?
Students: This is a great company over a long period of time.
JG: Did you factor in how much room they have to expand—grow their store base? How much more expansion do they have?

10x pre-tax (EV/EBIT)? Usually I would take off $40 \%$ for taxes so you would have a $6 \%$ return ( $10 \%-4 \%$ ). If the tax rate is lower due to overseas operations, sometimes they can't repatriate the money. Ask why that tax rate is lower or if that tax rate is sustainable?

Student: Timberland is growing abroad so we do not see repatriation as an issue. We also discounted back two years in our valuation.

Analyst: How does the business break out between domestic and international operations regarding operation margins? What are international competitors doing? Since you say their international division is growing 20\% to $22 \%$ overseas.

How much of their business comes from the work boot area versus their entire sales because you said their strong margins are due to their strong customer loyalty in foot wear.

Student: Timberland messed up on apparel in the US so earnings for 2006 are depressed (temporarily we believe). EBIT margin of 2005 is $11 \%$.

Analyst: Did you break out their licensing revenue from other revenue? Licensing revenue is very high margin revenue.

Student: No, but it is very small.
Analyst: Companies will tell you if you ask them to break out their licences. Revenue. You can always assume the licenses. Revenue is an 80\% margin business.

Footlocker, Inc. (FL).
There are three main reason to buy FL as it sits at $\$ 20$ with our price target of $\$ 26$ which is a $35 \%$ upside.
Three (3) main reasons to buy FL:


Increase in operating margins. The management is shutting down over-size big store concepts in early 2000 and improving their operating margins. $15 \%$ average over the last 4 years and mgt. stated a target of $10 \%$ with it currently at $7.4 \%$. Op. margins.

Domestic growth is uncontested in Footwear for teens. Growth in mall space across the US. They have Strong portfolio of business with different footlocker products and Chance with an 11\% EBIT margin.

## Valuation:

Average store size 300 square feet. Year-by-year growth in sq. footage. CAGR is $2.5 \%$ over the last five years. Sales per Sq. Ft. is $\$ 529$.

JG: They have been closing some of their stores and that will stop, so using net square footage number may be misleading. So I would look inside that number to see what was the growth of the smaller stores ex-the closing of the big-store concept.

What you said is that they are closing the big store concept while their square footage is growing $2.5 \%$ per year. Look at growth with just the small store concept. Break out the concepts!

EBIT margin for whole company is $10 \%$. $\$ 50$ million in EBIT. Using a $7 \%$ EBIT margin you get $\$ 350$ in EBIT to be conservative. The best case is $10 \%$ margin. We do think there will be competition from Finish Line. We put an 8 multiple on that since the business is not growing. Then you add $\$ 400$ million for the online business and build up of cash.

Analyst: Pension (debt) in regards to Enterprise Value? (Did you adjust the Pension liabilities if needed and add to your EV?)

Student: We did a standard EV/EBIT analysis. We expect per share appreciation of $27 \%$ for the base case.
JG: Did you break out the domestic and international divisions? They have different margins and margin opportunities. The market went way down in Europe (margins collapsed from $18 \%$ to $10 \%$ ). Their margins used to be $18 \%$ so the question is do they normalize at $10 \%$ or higher. But if Linda (Greenblatt) were here she would probably say the margins probably normalize around $12 \%$ margins that would be her best guess.

I think you have the big picture, and you did a nice job with not much time. I am trying to point out what I would do.

The more you can break it (the Company) apart the better. In some businesses the different parts feed on each other. But in FL there is enough disparity in the growth opportunities, the margins and the competitive landscape in Europe vs. the US where you need to pick apart the different businesses separately. There is extreme margin contraction from $18 \%$ to $10 \%$. There is a lot of room there. The question is where it lands.

Management believes that their margins can be double digits. I am trying to bring up issues as how I would approach it. Their competitive position is very strong since their nearest competitor is five times smaller?

Student: Yes, it is.
Analyst: This applies to both presentations--operating margins are the value investors' growth number. The scariest thing to get into earnings is that you feel the urge to go to a reversion to the mean thesis or management estimate thesis like FL. Often those are the best answers you can come to, but the best you can do in all cases is to try to get as bottom up to that number as you can. Do what Joel suggested which is to separate the businesses. You did that with operating leases and how they made progress at FL.

Student: How do you treat operating leases?
Analyst: In most cases it doesn't matter. In some cases where rent is different than market rates, it can matter so you have to adjust for market rates to figure out normalized.

Pensions. The most important time to add pension debt to the EV is when the company is not funding expense through the income statement. Say you have $\$ 300$ million in pension assets and you are really paying $\$ 30$ million a year into that pension for employees that are already retired and those that are in service. Sometimes pensions get screwed up because it is done on a lagged smoothed basis. So you must make sure you add back the pension debt on an adjusted present value basis if it is under funded.

JG: If management is using an unrealistic assumption of $9 \%$ returns for their pension plan but you think the returns should be $5 \%$ or $7 \%$, then I would adjust the pension liability and use your adjusted number.

## Claire Stores:

Students: A mall based Store. $\$ 2.71$ billion market cap. They have 2800 stores. The stock is $\$ 27$ and we get to a valuation of $\$ 27$ to $\$ 34$ depending upon your assumptions going out five years.

We use a 22\% margin for the US and international is 17\% margin in EBIT so we used
JG: What type of growth do you use for them? Is there inflation growth?
Students: We use 5\% annual growth.

JG: Why are they not growing now? So you are assuming mature growth in five to ten years? What did you do with the cash?

Students: We built up cash of $\$ 7$ per share.


Students: Their (gross?) margins are 55\%.
JG: Why are their margins so high-they can source their goods very cheaply?
Students: They have an efficient operating model.
JG: Buy one; steal one—a store that had small, cheap jewelry for teenagers.
Analyst: What are their ROIC in their stores? You gave it a low multiple of 12, but this company has profitable growth—perhaps it deserves a higher multiple-especially where the market is currently trading at.

Students: 27\%.

## Cross Checking Your Multiple

JG: Did you do a discounted cash flow analysis to determine an appropriate multiple?
Student: No we did not.
JG: A DCF analysis would help you determine a proper multiple as a cross check. A 5\% growth in perpetuity will blow out most growth models and gets you a very high multiple. So the question is what happens at $3 \%$ or $5 \%$ growth in perpetuity? It might be interesting to have a matrix of various growth rates to judge the multiple. What multiple theoretically is $5 \%$ growth in perpetuity? Where does your 12 multiple fit into that?

You figured a $15 x$ multiple ( $6.6 \%$ yield) after tax was a reasonable price for Claire Stores. I say use a minimum $6 \%$ hurdle rate. At best what we will get out of here is that it is a great business, it won't lose much money and at some point it will get a higher multiple. You are probably being too conservative which is OK because you are trying to buy it at a huge discount.

If you start growing 5\% a year and you feel very confident about that, then that potentially becomes worth a lot of money some day and it deserves a high multiple. Now, if you can find things a lot cheaper than that fine. But instead of picking 12 multiple out of the air, it is nice to go through that matrix to determine the appropriate multiple. (Don't just assume a multiple even if conservative-cross check it).

K-Swiss designs and outsource the manufacturing of footwear. A nice stable growth business.
No comments........


COCO


The company takes six or seven years to integrate an acquisition of a new campus. They have made 80 acquisitions in the past four years. We think the company is worth $\$ 22$ while it is currently trading at $\$ 12$. We assume improvement in operating margins.
JG: Do you trust these guys? Explain the big picture thing. Don't they get funding from the government for the tuition and aren't there claims of fraud against the company?

There are no convictions but I'm a great guy? Are they goosing the numbers, are they too aggressive, why is the operating margins dropping-what did they do in the past that is different now?

Analyst: 72\% upside? You think it will be worth $\$ 22$ in 2010? Why do you think it will get there quicker? Explain what you mean by campuses.

Student: ROIC regarding acquisitions? Would goodwill be a good proxy for capital—a decent proxy for capex since they are constantly buying campuses? If they didn't acquire campuses then they would have to build the schools?

JG: They are buying these campuses for their earnings power not the cost of their assets to be able to put the schools together. Wouldn't it cost them to expand? Basically you have to use logic on each one.

Simplify everything-what is it worth now if they just stopped and grow? Then if they take some of their incremental dollars capital and buy stuff what kinds of incremental returns do I think they are going to get on that? So I break things into two pieces generally. They have what they have now. Incrementally if they stop growing what is that worth? If they can generate this much cash, so what will they do with that cash? They can distribute cash (pay a dividend), buy back stock or acquire stuff. I have to make an assumption of what will they do with that cash. If they start acquiring stuff, I have to ask, "Will that be a good use of the cash or not?" And value it that way. It gets to be too amorphous if you start assuming if they are going to buy these many at this time or at this price? If that all changes it mucks up the whole works.

I take what I have and then if they are going to spend some cash do I think is it going to be a good thing or a bad thing (the company which is making acquisitions). And then I ask, "How much do I think they are going to earn on that?" That is the way I take apart your question and try to attack it.

## Quantify Growth Mathematically_Growth Matrix of New and Maturing Schools

Another thing that is very important especially with retailers-here was a situation--any time you can quantify something. Here was a question where $1 / 3$ of the schools were two years old, a $1 / 3$ were four years old and a $1 / 3$ were at saturation at 6 years, you can figure out what the growth rates are going to be just from the stuff that you have until maturity. You can pick out the normalized growth rate and margins instead of taking the margins that are there now. If I really did think the two year schools would mature over the next four years and increase margins and the four year old schools will increase over the next two. You can figure out with a matrix as to where it (the margins and growth rate) will be at maturation and then how much growth from there. You can do the math and it is always helpful to it. This is similar to figuring out store bases that take a time to mature. You can see how many stores are open over the last three years or last two years and see what is going to happen in the future and you can almost project part of that. A lot of people don't do it and it is the easy stuff. It is just math and you can get a feel for the (future growth).

Second Part of Class Back From Break $\qquad$

## INVESTING USING JOEL's LITTLE BOOK

## The Little Book That Beats the Market (Hardcover)

by Joel Greenblatt
Discussing his new book........."The Little Book"
A few years ago during the Internet craze, his (Joel Greenblatt's) students just ignored him and called him an idiot and they said, "Look at Price-line! It will double. This is the ad in Barrons' at the time to attract
members to his Value Investors' Club. Value investing was so bad back then we showed an outline of a dead man. (See appendix for slide presentation).

Back to the story.....so over the years it became apparent to me that Graham was one side of the equation which was cheap and Buffett was: "I would like to buy a good company that could earn good money and had a good franchise that was going to stay there and be able to earn good money going forward." So the question was: "Can you combine good and cheap at the same time?"

We did a little bit of a test. We defined the same things I taught you. Good companies we define as having high returns on capital which is operating income divided by net working capital and net fixed assets. We use high returns on tangible capital. So that is how we defined good. High return on tangible capital gives a very good indication that this may be a good company. Cheap was EV to EBIT (Earnings Yield) which is a little more sophisticated than a P/E analysis taking into account different capital structures and being able to compare companies over a wide array on a fair basis. This equalizes capitalizations.

The Study
We used last year's numbers, we didn't use projections. So what we did was in the study: we ranked companies 1 to 3500 based on their Pre-tax Return on Invested Tangible Capital (ROIC). The best ROC companies we will rank the highest. So we take the 3500 largest stocks in our database and rank them on ROC just straight out. And then we did the same thing for cheap, we ranked 3500 companies on earnings yield: 1 3500 on earnings yield. We used last year's numbers. It was the first thing we tried. It (last year's numbers) is good information to have, but certainly it is not disputable information to have.

We wanted to make it easy so we used last year's numbers. We didn't use five-year averages or projections. This is the first thing we tried, we kept it simple. You can imagine all the problems with using last year's numbers, they are not normalized. There are aberrations. It is good information to have but it is certainly not disputable information. It wasn't projections. It is not using an arbitrary number or average over the past five years. When you are back testing, it is dangerous because people adjust all the time or use estimates. The question is that analysts get better over time, they over estimate, they underestimate-everyone evolves. So we didn't use any of that. Analysts' estimates adjust slowly so they change slowly. We use the simplest number-last year's numbers.

We sought companies with high ROIC and a high earnings yield. It doesn't sound that complicated. We ranked from 1 to 3500 on ROC and $1-3500$ on earnings yield. We combined the rankings. If you had the $50^{\text {th }}$ best ROC and the $100^{\text {th }}$ best earnings yield your combined ranking was $150\left(50^{\text {th rank in ROIC }}+100^{\text {th in earnings yield })}=\right.$ 150th ranking. This is very helpful. Obviously we would rather have a normalized number than a trailing number but there was no dispute about this.

This is for the top 3500 companies. This is what we did in 1988 we did $27 \%$ using the magic formula vs. $24.4 \%$ using a market equally weighted average. In that 30 stock portfolios of highest ranked stocks (the top or $1^{\text {st }}$ deciles) and each stock was held in the portfolio for one year. What we did was Jan. 1988 to Jan 1989, then Feb. 1988 to Feb. 1989 and so on..... We measured 193 periods during the 17 years using rolling one year periods. We used many, many portfolios and it was the average of those portfolios. The bottom line is that we used a lot of time periods and stocks. The magic formula stocks ( 30 out of the 3500 stocks) did about $30 \%$

We used market caps above $\$ 50$ million and we had criteria that those small caps had to have a certain amount of volume to be included. We had a minimum trading volume requirement also. People couldn't say that the results were because of the small cap effect where investors wouldn't be able to buy the shares.

Student: What weighting created the highest market return?
Joel Greenblatt (JG): Let's talk about that later. We just used high return on capital and just cheap (high earnings yield) and then combined the two rankings using an equal weighting of high ROIC and high EBIT/EV or earnings yield.
Student: What about other metrics like price/Sales or low P/E to high ROE?

JG: Let’s just say this did a lot better.
So you could say, "You know the stocks are too small." So-as you will see in the book--we did the same thing for the largest 1000 stocks with $\$ 1$ billion market cap and over. $80 \%$ of the managers each year can't beat the S\&P 500. And that doesn't mean the same manager doesn't beat the market each year. To beat it over time is tough but we basically doubled the return of the S\&P 500 ( $12.4 \%$ return vs. $22 \%$ for our portfolio). We ranked stocks based on the best return on capital $(1-3500)$ and earnings yield $(13500)$ and then combined the rankings using an equal weighting. A company might not make the list because it wasn't that cheap. The ranking depends upon the best combined rankings. There were 12 portfolios a year so we averaged the returns. So we got a lot of years out of each test. The returns weren't due to just a lucky Jan. or a lucky July, it was a combination of all of those (months).

A few things looking at this chart.

## Holding Periods

There were times it didn’t beat the market like in 2002. In 2002 it was down $22.7 \%$ vs. the market being down $22 \%-$-a difference of negative $0.7 \%$. The magic formula wasn't much more volatile than the market during the bad times for the big stocks. Bad stuff happens which is tough but you have to stay the course because things work out in the end. My argument here.....what would be the flaws in the largest 1000 stocks? There were 360 stocks each held for a year. Turnover was for one (1) year. Every stock was held for one year.

## Small Cap Effect

Small caps in this period did no better or worse-it really wasn't the small cap effect. When you buy value stocks no matter what databases you are looking at you are generally buying smaller stocks because the stocks are out of favor. The market caps are depressed because they are out of favor and they have low prices. Market cap is price x fully diluted outstanding shares so value stocks are skewed toward the smaller market caps. The stocks are out of favor so people are not paying a lot for them. The higher priced ones are popular. The sales are not different but the market cap is smaller because they are out of favor and people are not paying a lot for them.

You could argue that liquidity was a problem here. Just as Graham's stocks disappeared-- his (Joel Greenblatt's) thirty favorites even though he did it every year and every month, between the three tests we did, we did over 4500 stock picks over the time--you might argue that the picks might go away like what happened to Graham's stocks. The market could get more efficient, etc. I don't think it is particularly valid. But that is one argument I would be sensitive to.

## The Opportunities Disappear

So we did another test of the top 2500 stocks and we divided them by rankings into deciles. The best ranking was deciles 1 ; the second best ranking was in deciles $2 \ldots$ to deciles 10 . The performance matched the declining deciles almost perfectly. The top deciles made $18 \%$, then the second did $17.5 \%$, the third did $15 \%$, etc. My argument is that if the first 30 don't work, the next 30 stocks will do well. It works in order. If you know a couple of things and you know what a stock is going to do in the future, that is probably valuable information.

## What JG Does or How Gotham Partners Invests vs. What the Book Suggests

We (Gotham Partners) know a little bit more than what I wrote in the book. But I figured if you could double people's returns in stocks or close to triple the return in small stocks that was worthwhile. We do look for these two things (high ROIC and high earnings yield) but instead of looking at last year's earnings we use normalized earnings. Most people can't figure that out. We can't figure it out for most stocks, but for those stocks where we can figure it out, we are looking for companies with high returns on tangible capital on a normalized basis and high earnings yield based on normalized earnings. That is just very logical.

I have been doing this for 25 years so I am pretty good at it. And you are Columbia MBA's who are good at it and who will keep getting better at it as you practice. So that is what I taught you in this class this year. But it is just nice to know. I really wrote this book so my kids could understand what I do.

## Basically it is much more important than that. These are the basic fundamentals things that will keep you making money over time and giving you something to focus on.

So what I would use this for instead of setting up a formula thing is to say, "Cling to this." And say, "What I am doing makes sense. If I get my normalized earnings right then what I am doing makes a heck a lot of sense. And even if I screw up or even if the market doesn't agree with me this year or next year, if I keep doing this then hopefully I can beat this rather than using last year's earnings and not thinking and finding these things. What I am hoping this does for you is to use this as a guide to find companies (this is written for the masses so the masses have to go do this-stick to the formula approach).

If you know how to figure out normalize earnings, then fine. But $95 \%$ of the people shouldn't use normalized earnings because they can't figure it out, and I wouldn't trust their opinion but I would trust yours especially as you practice on. And if you do that and cling to this notion of what you are doing makes sense and I go through later why this makes sense, then you can withstand the difficult times. And we will discuss this in our review session.

Ch 9 in my book describes why ROC is so important. And I go through the book why this makes sense. The most important chapter in the book is chapter nine (9). Why ROC is so important and what does that get you. Why high ROC companies are more likely to have moats and earnings growth. That is what you are really shooting for. To know how the numbers stack up is very powerful. I think it is very powerful to say that if I spend my time in this area ( $1^{\text {st }}$ deciles of Magic Formula Stocks) this is how they average out and maybe I pick the winners. I can pick up 18\% (being in the top deciles of Magic Formula Stocks) or maybe I can do better.

Student: Aren't you costing yourself a lot of money (by giving this information out)?
JG: Actually, no. The answer is this....the answer is that it is very hard to do and I will get into that so I am not worried about it at all. I will tell you two stories.

That is a great question by the way; I assumed it was going to be the first question I would get. "Aren't I a blabber mouth? Didn't I ruin everything?" Why I am not worried too much.

The first story is about a book written called, What works on Wall Street (2005) by Shaughnessy about investing formulas. The guy back tested 40 formulas on what worked in the market. He tested dozens of formulas and picked the ones that performed the best and started a mutual fund. The first year the fund didn't do so well, then the second year his fund underperformed by $25 \%$ and then the third year he underperformed compared to all his competitors. So after three years, he suffered terrible underperformance. After that he sold his fund to someone else and the he found something else to do.

The guy who wrote the book, who did all the studies and who knew that it worked, he quit and sold his fund management company to someone else. This person who purchased Shaughnessy's business continued to use the formula and has been tremendously successful. Shaughnessy couldn't take it. This is not a straight thing; it doesn't work all the time. If it worked all the time, it wouldn't work at all.

Another story is about Richard Pzena, who started his business in1996. He was underperforming for four years. He decided to keep doing what he knew worked (He bought the market's lowest price to earnings stocks on a normalized basis). That takes fortitude to stick to it when all your customers are walking out the door. If he wasn't working for himself he would have been fired. Rich used a formula and picked stocks from that formula. It had worked for many, many years and it wasn't working.

Today flash forward five years and he is in the top $1 \%$ of all money managers, he has over $\$ 15$ billion of institutional money and many investors. He has 100s of institutional investors, but he has only 4 of his original investors and I am one of them because I am his friend.

It works about $60 \%$ of the months (193 1-year rolling periods) it works 2 out of three years. If you go with 2 year rolling periods it works 5 out of 6 years. It even underperforms three years in a row. It really is probably no different than the experience Rich Pzena would have picking stocks. There will be a rolling three year period where you underperform the market. It doesn't always work. But underperforming for five years is tough to take.

There is also the example of my son who started in March. My son is doing well. And my daughter who started in Aug is getting killed. You can imagine how many people would quit. My Editor is doing this and he is getting killed. He says to me, "Alright now I get it." I talk about it in the book, imagine buying a book and you start losing real money. You are just following a computer and you are buying stocks like Lear (LEA) and you are losing money. "Wait! Why am I buying this? The market is telling me it stinks."

When the market is telling you it stinks, it is very hard to do. It is the same argument, studies have been out for many, many years and it continues to work. I am not particularly worried about ruining your life.

Just telling you guys to do this stuff and you go out and run billions of dollars and I have been doing this for ten years (teaching MBAs), this info is out already there.

Warren Buffett (WEB) wrote up, if you go back, about return on tangible capital in 1983 (see appendix about Buffett's write up on ROIC). Hopefully this is a little clearer. I still think there will be many periods where this doesn't work. And most people won't do it, especially institutions. I am hoping individuals do it.

I am only talking about beating the market not making money. Most people are very short term oriented so you should measure (results) over three year periods. From the rolling three year periods it never lost money though it didn't beat the market in some periods.

Student: Are there other factors that allowed the formula to work better like the market going up vs. going down?

JG: We look at results over three year period. In 169 rolling three year periods, the magic formula never lost money. It didn't beat the market in some but it never lost. The worst three year period was down 40\%. There is a big difference there.

Student: Are there any periods for the magic formula that were especially good like when there was a good market?

JG: No, most people are short-term oriented so they should look at a three year period. No rolling three year period ever lost money.

Holding Period
We are using trailing one year results. If you hold it for more one year, say two years, it still works. I picked one year for tax purposes-it wasn't actually the best period. One year gives the freshest data because if you hold for another year, you are using two year old data. You would rather have fresher data than way outdated data, so we refresh the portfolio each year on a rolling basis. Once you have faster than one year turnover then you get into transaction costs. You sell your losers in less than a year and your winners in more than one year. So one year is more efficient and more tax efficient.

Student: Would you use this to short stocks?
JG: I wasn't prepared to share that.
My quibble with long/shorts-the guys who do special situations in shorts where it is a scam or the company will run out of money. I like those type of shorts though I am not particularly good at them. If you are doing valuation shorts then I don't like that. That strategy blows up every seven or eight years-the shorts go up and the longs go down and that happens to every quant guy. I am not saying a long/short hedge funds doesn't make sense. But If I don't value short term volatility because I take a three or four year view. Then why give
up $2.5 \%$ a year in returns by shorting. I am not adding value. This doesn't add value because I am losing 2.5\% a year and I don't care about volatility.

Student: When you pick your top 30 do you start with your top deciles?
JG: When we find stocks, we do various things like look at stock screens. Then we look at competitors of the company we are looking at, we do reading. I would be less structured as this, I care about normalized high returns on capital though I don't care if its $50 \%$ pre-tax ROIC or $80 \%$ ROIC, but I just say good is good and really good is really good. And then cheap....there are other elements here. You pick normalized earnings and you also want to pick a normalized growth rate and how confident $I$ am in those projections.

Buffett wants the certain one where he is pretty certain about normalized earnings and its growth rate. Those are other elements to decide how cheap it is taking into account the long term growth rates and things of that nature. Once again, drive a truck through it (it should be obvious; it is cheap). I am not running to a computer to see how cheap it is. When we did an analysis of Aeropostale we all came to a conclusion that it was cheap, and we weren't risking a lot and we could make money if the new concept takes off. I would go through the same thesis and use my head to figure it out. I would this for to give you confidence.

What I would use this (The Magic Formula and the list of magic formula stocks) for is to give you confidence if you know it in your gut (that it makes sense and it works over time). What I said in the book, knowing two plus two equals four (how to value something is very powerful). It doesn't matter what other people say or the newspaper says or how unpopular it is if two plus two equals four. If you know two plus two equals four, then you stick with it. In two weeks we will go over why this makes sense especially in the basket approach. You will stick with it when you have those down $20 \%$ years.

Believe me, when you look over 17 years and you calculate the averages it looks like any idiot should know that this works. But in the middle of doing it when you are down $\mathbf{2 5 \%}$ you don't really know if it is still working. Does it make sense? Have things changed? Is it really going to earn that next year? Or newspapers were a great franchise, but they are no longer a great franchise and they are running down.

Blockbuster had high earnings last year and but that is a dying business. Am I really doing the right thing? It gets tough. That (following the Magic Formula) is easy to do when you first start doing it, but when you are losing money doing it or everyone else is doing much better it becomes a totally different thing. I am usually accused of making everything sound too easy-I am guessing. (Laughter from students).

I do have this in my head. What I am doing makes sense and what I am calculating makes sense. And I have to keep telling myself that a lot of times but to have things like this to cling to; that what you are doing makes sense. I go step by step in the book why this makes sense. Why high ROIC makes sense and you need to know that what you are doing makes sense.

## Originally Opening Up a Hedge Fund

I raised money from Michael Milken after working for a few years for a hedge fund doing merger arbitrage.
Lesson from Milken: he could stay very focused on this one point. He stayed focused on what he was doing at the time no matter what the distractions. A good lesson for me.

My claim to fame was that I kept Ron Perelman waiting for an hour while negotiating my deal at age 27
If I made $30 \%$ in the first year was my break even. It was a high cost business. But I took half of what he offered me because I knew there was an unlimited checkbook if I did well.

Student: Are there companies that keep cropping up in your Magic Formula List?
JG: Yes, there are and I don't know if they are the ones you want to be buying but we took what we got. Companies that are always cheap, maybe there is something wrong with them.

The averages were calculated on a large amount of stocks so the results were more robust. We used a database from Compustat.

## Arguments against the Magic Formula Investing.

The data was not available at the time so you were back testing. So we used the CompustatDatabase. Thus survivorship bias was irrelevant. "Well they cleaned up the database by taking out the bankrupt companies," critics could say. Again, it was irrelevant. Small companies can't be purchased without high transaction costs. We used 1000 big cap stocks, and the formula still worked well.

The Fama \& French Study-everything was determined by low/price to book, Beta and small cap effect. My opinion was that it was a ridiculous study. Small caps were one indication of being out of favor; low price to book happens to be cheap, but it is not why it is cheap. They just happen to be cheap. This is a much more direct way of finding cheap stocks. They happen to be cheap that is not why it is cheap. On the side it works that is really not how the market works. I think that study is completely missing the point.

But they came out and say, "Not only did we beat the market with our low price to book stocks but they were less volatile. It is not that the market is inefficient it is because of risks we can't find. (Stupid!)

A comment on Beta. If you think of owning a share of a company, how volatility makes any difference regarding risk is nonsensical. How volatile the stock price is over the past six months makes no sense in analyzing risk.

They found out that the stocks with low price/book values were less volatile and had better returns. The returns have to do with other risks we can't find or can't describe. You take on more risks to make more money. These companies are crummy companies-that is why they beat the market (hidden risks).

Fama \& French can't make this argument against the Magic Formula Stocks. On average these stocks are good companies. Many don't have much debt, they are not going bankrupt and they don't need much capital. They are earnings a lot of money.

Even if they were right, which they are not, then the next argument is data-mining. You spit out a lot of data and find out what factors work great then show the results. The answer to that is that this is the first thing we tried. This is based on the way we invest not based on any previous study. We invest based on quality and price. We did no previous studies. We were just curious to see how well it worked.

The other answer as to why I wrote this was to come up with an easy metric for people to use. I had no idea it was going to work this well. I still think the same arguments apply which is there have been many market beating studies, value investing is hard. You can set up a fund to beat the market with low P/E stocks. There are guys who have set up funds to beat the market investing in low P/E stocks and nothing else. Believe me there are guys who have 71 factor models. This two factor model beats the seventy one factor model. There are models to beat the market, but it is still tough to stay in business and do that.

Student: How do you get the data? Do you do a Bloomberg dump.
JG: I learn from reading. Wharton Business School still teaches efficient market theory. I learn by reading Graham, Dreman and Buffett. I always thought about one day writing as a way to give back. That is why I teach also, I enjoy doing it. I was writing this book, and I started looking for databases to for readers to use. I looked at Business Week database because BW is owned by S\&P which owns Compustat, but the BW site doesn't use the Compustat data which was the data we used for the study. We wanted to avoid the gibberish of many databases because this book was written for the masses. For you guys it is fine because you can actually use your head and say, "Well, that doesn't make sense because of a special item there, etc. I wouldn't recommend blindly doing this. But if I am writing this book for the masses, I am a little worried because they are programming in EBIT and return on tangible capital. It is kind of tough to do, and you can't really do it in some of these.

By the way, some of you are in that class where low P/E and high ROE is used (Von Mueffling Class). It turns out that low P/E and high ROE investing is pretty darn good. This is better, but the concepts are similar. Low P/E and high ROE is great. This (Magic Formula) is obviously better, because it takes into account differences in taxes and capital structure much better in my opinion and the data bears that out.

We leave out finance and utility companies in our study. I would say low P/E and high ROE would work pretty well there too.

Student: Did you take a look at just investing in high ROIC companies regardless of price:
JG: If you don't take into account price, I don't call that investing. I would never invest without considering price especially using a computer. I guess the market could always underestimate high ROIC businesses, but I would never think of using that metric without combining it with price. What type of business is it and can I buy it cheap? OK? I am just sticking to those two things.

The hard part coming up with normalized earnings. The hard part is really living with your choice and sticking to your guns when the market disagrees with you. That is the hard part. That is the whole ball of wax.

Student: Does this type of investing work in Europe?
JG: Every value study that has ever been done has worked across all markets over time. There has never been a contradiction to this.

Next time read the book and we can discuss it further.

## END of Class

## APPENDICES:

1. Buffett Writing on ROIC
2. Magic Formula Slide Presentation by Joel Greenblatt
3. Article on Joel Greenblatt

## Goodwill and its Amortization: The Rules and The Realities (BERKSHIRE'S 1983 Annual Report) <br> (Discussion of using tangible return on capital as a judge of businesses) <br> Book Value vs. Intrinsic Value

We report our progress in terms of book value because in our case (though not, by any means, in all cases) it is a conservative but reasonably adequate proxy for growth in intrinsic business value - the measurement that really counts. Book value's virtue as a score-keeping measure is that it is easy to calculate and doesn't involve the subjective (but important) judgments employed in calculation of intrinsic business value. It is important to understand, however, that the two terms - book value and intrinsic business value - have very different meanings.

Book value is an accounting concept, recording the accumulated financial input from both contributed capital and retained earnings. Intrinsic business value is an economic concept, estimating future cash output discounted to present value. Book value tells you what has been put in; intrinsic business value estimates what can be taken out.

An analogy will suggest the difference. Assume you spend identical amounts putting each of two children through college. The book value (measured by financial input) of each child's education would be the same. But the present value of the future payoff (the intrinsic business value) might vary enormously from zero to many times the cost of the education. So, also, do businesses having equal financial input end up with wide variations in value?

At Berkshire, at the beginning of fiscal 1965 when the present management took over, the $\$ 19.46$ per share book value considerably overstated intrinsic business value. All of that book value consisted of textile assets that could not earn, on average, anything close to an appropriate rate of return. In the terms of our analogy, the investment in textile assets resembled investment in a largely-wasted education.

Now, however, our intrinsic business value considerably exceeds book value. There are two major reasons:
(1) Standard accounting principles require that common stocks held by our insurance subsidiaries be stated on our books at market value, but that other stocks we own be carried at the lower of aggregate cost or market. At the end of 1983, the market value of this latter group exceeded carrying value by $\$ 70$ million pre-tax or about $\$ 50$ million after tax. This excess belongs in our intrinsic business value, but is not included in the calculation of book value;
(2) More important, we own several businesses that possess economic Goodwill (which is properly includable in intrinsic business value) far larger than the accounting Goodwill that is carried on our balance sheet and reflected in book value.

Goodwill, both economic and accounting, is an arcane subject and requires more explanation than is appropriate here. The appendix that follows this letter - "Goodwill and its Amortization: The Rules and The Realities" - explains why economic and accounting Goodwill can, and usually do, differ enormously.

You can live a full and rewarding life without ever thinking about Goodwill and its amortization. But students of investment and management should understand the nuances of the subject. My own thinking has changed drastically from 35 years ago when I was taught to favor tangible assets and to shun businesses whose value depended largely upon economic Goodwill. This bias caused me to make many important business mistakes of omission, although relatively few of commission.

Keynes identified my problem: "The difficulty lies not in the new ideas but in escaping from the old ones." My escape was long delayed, in part because most of what I had been taught by the same teacher had been (and continues to be) so extraordinarily valuable. Ultimately, business experience, direct and vicarious, produced my present strong preference for businesses that possess large amounts of enduring Goodwill and that utilize a minimum of tangible assets.

## Goodwill and its Amortization: The Rules and The Realities

This appendix deals only with economic and accounting Goodwill - not the goodwill of everyday usage. For example, a business may be well liked, even loved, by most of its customers but possess no economic goodwill. (AT\&T, before the breakup, was generally well thought of, but possessed not a dime of economic Goodwill.) And, regrettably, a business may be disliked by its customers but possess substantial, and growing, economic Goodwill. So, just for the moment, forget emotions and focus only on economics and accounting.

When a business is purchased, accounting principles require that the purchase price first be assigned to the fair value of the identifiable assets that are acquired. Frequently the sum of the fair values put on the assets (after the deduction of liabilities) is less than the total purchase price of the business. In that case, the difference is assigned to an asset account entitled "excess of cost over equity in net assets acquired". To avoid constant repetition of this mouthful, we will substitute "Goodwill".

Accounting Goodwill arising from businesses purchased before November 1970 has a special standing. Except under rare circumstances, it can remain an asset on the balance sheet as long as the business bought is retained. That means no amortization charges to gradually extinguish that asset need be made against earnings.

The case is different, however, with purchases made from November 1970 on. When these create Goodwill, it must be amortized over not more than 40 years through charges - of equal amount in every year - to the earnings account. Since 40 years is the maximum period allowed, 40 years is what managements (including us) usually elect. This annual charge to earnings is not allowed as a tax deduction and, thus, has an effect on after-tax income that is roughly double that of most other expenses.

That's how accounting Goodwill works. To see how it differs from economic reality, let's look at an example close at hand. We'll round some figures, and greatly oversimplify, to make the example easier to follow. We'll also mention some implications for investors and managers.

Blue Chip Stamps bought See's early in 1972 for $\$ 25$ million, at which time See's had about $\$ 8$ million of net tangible assets. (Throughout this discussion, accounts receivable will be classified as tangible assets, a definition proper for business analysis.) This level of tangible assets was adequate to conduct the business without use of debt, except for short periods seasonally. See's was earning about $\$ 2$ million after tax at the time, and such earnings seemed conservatively representative of future earning power in constant 1972 dollars.

Thus our first lesson: businesses logically are worth far more than net tangible assets when they can be expected to produce earnings on such assets considerably in excess of market rates of return. The capitalized value of this excess return is economic Goodwill.

In 1972 (and now) relatively few businesses could be expected to consistently earn the 25\% after tax on net tangible assets that was earned by See's - doing it, furthermore, with conservative accounting and no financial leverage. It was not the fair market value of the inventories, receivables or fixed assets that produced the premium rates of return. Rather it was a combination of intangible assets, particularly a pervasive favorable reputation with consumers based upon countless pleasant experiences they have had with both product and personnel.

Such a reputation creates a consumer franchise that allows the value of the product to the purchaser, rather than its production cost, to be the major determinant of selling price. Consumer franchises are a prime source of economic Goodwill. Other sources include governmental franchises not subject to profit regulation, such as television stations, and an enduring position as the low cost producer in an industry.

Let's return to the accounting in the See's example. Blue Chip's purchase of See's at $\$ 17$ million over net tangible assets required that a Goodwill account of this amount be established as an asset on Blue Chip's books and that $\$ 425,000$ be charged to income annually for 40 years to amortize that asset. By 1983, after 11 years of such charges, the $\$ 17$ million had been reduced to about $\$ 12.5$ million. Berkshire, meanwhile, owned $60 \%$ of Blue Chip and, therefore, also $60 \%$ of See's. This ownership meant that Berkshire's balance sheet reflected 60\% of See's Goodwill, or about \$7.5 million.

In 1983 Berkshire acquired the rest of Blue Chip in a merger that required purchase accounting as contrasted to the "pooling" treatment allowed for some mergers. Under purchase accounting, the "fair value" of the shares we gave to (or "paid") Blue Chip holders had to be spread over the net assets acquired from Blue Chip. This "fair value" was measured, as it almost always is when public companies use their shares to make acquisitions, by the market value of the shares given up.

The assets "purchased" consisted of $40 \%$ of everything owned by Blue Chip (as noted, Berkshire already owned the other 60\%). What Berkshire "paid" was more than the net identifiable assets we received by $\$ 51.7$ million, and was assigned to two pieces of Goodwill: $\$ 28.4$ million to See's and $\$ 23.3$ million to Buffalo Evening News?

After the merger, therefore, Berkshire was left with a Goodwill asset for See's that had two components: the $\$ 7.5$ million remaining from the 1971 purchase, and $\$ 28.4$ million newly created by the $40 \%$ "purchased" in 1983. Our amortization charge now will be about $\$ 1.0$ million for the next 28 years, and \$.7 million for the following 12 years, 2002 through 2013.

In other words, different purchase dates and prices have given us vastly different asset values and amortization charges for two pieces of the same asset. (We repeat our usual disclaimer: we have no better accounting system to suggest. The problems to be dealt with are mind boggling and require arbitrary rules.)

But what are the economic realities? One reality is that the amortization charges that have been deducted as costs in the earnings statement each year since acquisition of See's were not true economic costs. We know that because See's last year earned $\$ 13$ million after taxes on about $\$ 20$ million of net tangible assets - a performance indicating the existence of economic Goodwill far larger than the total original cost of our accounting Goodwill. In other words, while accounting Goodwill regularly decreased from the moment of purchase, economic Goodwill increased in irregular but very substantial fashion.

Another reality is that annual amortization charges in the future will not correspond to economic costs. It is possible, of course, that See's economic Goodwill will disappear. But it won't shrink in
even decrements or anything remotely resembling them. What is more likely is that the Goodwill will increase - in current, if not in constant, dollars - because of inflation.

That probability exists because true economic Goodwill tends to rise in nominal value proportionally with inflation. To illustrate how this works, let's contrast a See's kind of business with a more mundane business. When we purchased See's in 1972, it will be recalled, it was earning about $\$ 2$ million on $\$ 8$ million of net tangible assets ( $25 \%$ ROIC). Let us assume that our hypothetical mundane business then had $\$ 2$ million of earnings also, but needed $\$ 18$ million in net tangible assets for normal operations. Earning only $11 \%$ on required tangible assets, that mundane business would possess little or no economic Goodwill.

A business like that, therefore, might well have sold for the value of its net tangible assets, or for $\$ 18$ million. In contrast, we paid $\$ 25$ million for See's, even though it had no more in earnings and less than half as much in "honest-to-God" assets. Could less really have been more, as our purchase price implied? The answer is "yes" - even if both businesses were expected to have flat unit volume - as long as you anticipated, as we did in 1972, a world of continuous inflation.

To understand why, imagine the effect that a doubling of the price level would subsequently have on the two businesses. Both would need to double their nominal earnings to $\$ 4$ million to keep themselves even with inflation. This would seem to be no great trick: just sell the same number of units at double earlier prices and, assuming profit margins remain unchanged, profits also must double.

But, crucially, to bring that about, both businesses probably would have to double their nominal investment in net tangible assets, since that is the kind of economic requirement that inflation usually imposes on businesses, both good and bad. A doubling of dollar sales means correspondingly more dollars must be employed immediately in receivables and inventories. Dollars employed in fixed assets will respond more slowly to inflation, but probably just as surely. And all of this inflationrequired investment will produce no improvement in rate of return. The motivation for this investment is the survival of the business, not the prosperity of the owner.

Remember, however, that See's had net tangible assets of only $\$ 8$ million. So it would only have had to commit an additional $\$ 8$ million to finance the capital needs imposed by inflation. The mundane business, meanwhile, had a burden over twice as large - a need for $\$ 18$ million of additional capital.

After the dust had settled, the mundane business, now earning $\$ 4$ million annually, might still be worth the value of its tangible assets, or $\$ 36$ million. That means its owners would have gained only a dollar of nominal value for every new dollar invested. (This is the same dollar-for-dollar result they would have achieved if they had added money to a savings account.)

See's, however, also earning $\$ 4$ million, might be worth $\$ 50$ million if valued (as it logically would be) on the same basis as it was at the time of our purchase. So it would have gained $\$ 25$ million in nominal value while the owners were putting up only $\$ 8$ million in additional capital - over $\$ 3$ of nominal value gained for each $\$ 1$ invested.

Remember, even so, that the owners of the See's kind of business were forced by inflation to ante up $\$ 8$ million in additional capital just to stay even in real profits. Any unleveraged business that requires some net tangible assets to operate (and almost all do) is hurt by inflation. Businesses needing little in the way of tangible assets simply are hurt the least.

And that fact, of course, has been hard for many people to grasp. For years the traditional wisdom long on tradition, short on wisdom - held that inflation protection was best provided by businesses laden with natural resources, plants and machinery, or other tangible assets ("In Goods We Trust"). It doesn't work that way. Asset-heavy businesses generally earn low rates of return - rates that often barely provide enough capital to fund the inflationary needs of the existing business, with nothing left over for real growth, for distribution to owners, or for acquisition of new businesses.

In contrast, a disproportionate number of the great business fortunes built up during the inflationary years arose from ownership of operations that combined intangibles of lasting value with relatively minor requirements for tangible assets. In such cases earnings have bounded upward in nominal dollars, and these dollars have been largely available for the acquisition of additional businesses. This phenomenon has been particularly evident in the communications business. That business has required little in the way of tangible investment - yet its franchises have endured. During inflation, Goodwill is the gift that keeps giving.

But that statement applies, naturally, only to true economic Goodwill. Spurious accounting Goodwill and there is plenty of it around - is another matter. When an overexcited management purchases a business at a silly price, the same accounting niceties described earlier are observed. Because it can't go anywhere else, the silliness ends up in the Goodwill account. Considering the lack of managerial discipline that created the account, under such circumstances it might better be labeled "No-Will". Whatever the term, the 40-year ritual typically is observed and the adrenalin so capitalized remains on the books as an "asset" just as if the acquisition had been a sensible one.

If you cling to any belief that accounting treatment of Goodwill is the best measure of economic reality, I suggest one final item to ponder.

Assume a company with $\$ 20$ per share of net worth, all tangible assets. Further assume the company has internally developed some magnificent consumer franchise, or that it was fortunate enough to obtain some important television stations by original FCC grant. Therefore, it earns a great deal on tangible assets, say $\$ 5$ per share, or $25 \%$.

With such economics, it might sell for $\$ 100$ per share or more, and it might well also bring that price in a negotiated sale of the entire business.

Assume an investor buys the stock at $\$ 100$ per share, paying in effect $\$ 80$ per share for Goodwill (just as would a corporate purchaser buying the whole company). Should the investor impute a $\$ 2$ per share amortization charge annually (\$80 divided by 40 years) to calculate "true" earnings per share? And, if so, should the new "true" earnings of $\$ 3$ per share cause him to rethink his purchase price?

We believe managers and investors alike should view intangible assets from two perspectives:

1. In analysis of operating results - that is, in evaluating the underlying economics of a business unit - amortization charges should be ignored. What a business can be expected to earn on unleveraged net tangible assets, excluding any charges against earnings for amortization of Goodwill, is the best guide to the economic attractiveness of the operation. It is also the best guide to the current value of the operation's economic Goodwill.
2. In evaluating the wisdom of business acquisitions, amortization charges should be ignored also. They should be deducted neither from earnings nor from the cost of the business. This means forever viewing purchased Goodwill at its full cost, before any amortization. Furthermore, cost should be defined as including the full intrinsic business value - not just the recorded accounting value - of all consideration given, irrespective of market prices of the securities involved at the time of merger and irrespective of whether pooling treatment was allowed. For example, what we truly paid in the Blue Chip merger for $40 \%$ of the Goodwill of See's and the News was considerably more than the $\$ 51.7$ million entered on our books. This disparity exists because the market value of the Berkshire shares given up in the merger was less than their intrinsic business value, which is the value that defines the true cost to us.

Operations that appear to be winners based upon perspective (1) may pale when viewed from perspective (2). A good business is not always a good purchase - although it's a good place to look for one.

We will try to acquire businesses that have excellent operating economics measured by (1) and that provide reasonable returns measured by (2). Accounting consequences will be totally ignored.

Joel Greenblatt's Slide Presentation: Graham's Value Formula - Updated
Slide 1: Value investing isn't dead.
Five years ago, at the height of the Internet Bubble, we ran this ad in Barron's:
Value investing isn't dead. It is alive and well at Valueinvestorsclub.com
Slide 2: The Key to Successful Investing: Invest in Good Companies Whose Stocks are Cheap
Good companies have high returns on capital (ROIC)
■ Defined as operating profit (EBIT or EBITDA - MCX (Maintenance Capital Expenditures)) divided by working capital plus net fixed assets

Cheap stocks have high earnings yields
Defined as pre-tax operating earnings divided by enterprise value
Slide 3: Magic Formula Results

| Magic Formula Results |  |  | Difference |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Magic <br> Formula | Difference | Investing <br> $\$ 10,000$ | Market <br> Average | S\&P 500 |
| $\mathbf{1 9 8 8}$ | $27.10 \%$ | $2.30 \%$ | $\$ 10,230.00$ | $24.80 \%$ | $16.60 \%$ |
| $\mathbf{1 9 8 9}$ | $44.60 \%$ | $26.60 \%$ | $\$ 12,951.18$ | $18 \%$ | $31.70 \%$ |
| $\mathbf{1 9 9 0}$ | $1.70 \%$ | $17.80 \%$ | $\$ 15,256.49$ | $-16.10 \%$ | -3.1 |
| $\mathbf{1 9 9 1}$ | $70.60 \%$ | $25.00 \%$ | $\$ 19,070.61$ | $45.60 \%$ | $30.50 \%$ |
| $\mathbf{1 9 9 2}$ | $32.40 \%$ | $21.00 \%$ | $\$ 23,075.44$ | $11.40 \%$ | $7.60 \%$ |
| $\mathbf{1 9 9 3}$ | $17.20 \%$ | $1.30 \%$ | $\$ 23,375.42$ | $15.90 \%$ | $10.10 \%$ |
| $\mathbf{1 9 9 4}$ | $22 \%$ | $26.50 \%$ | $\$ 29,569.91$ | $-4.50 \%$ | $1.30 \%$ |
| $\mathbf{1 9 9 5}$ | $34 \%$ | $4.90 \%$ | $\$ 31,018.83$ | $29.10 \%$ | $37.60 \%$ |
| $\mathbf{1 9 9 6}$ | $17.30 \%$ | $2.40 \%$ | $\$ 31,763.29$ | $14.90 \%$ | $23 \%$ |
| $\mathbf{1 9 9 7}$ | $40.40 \%$ | $23.60 \%$ | $\$ 39,259.42$ | $16.80 \%$ | $33.40 \%$ |
| $\mathbf{1 9 9 8}$ | $25.50 \%$ | $27.50 \%$ | $\$ 50,055.76$ | $-2 \%$ | $28.60 \%$ |
| $\mathbf{1 9 9 9}$ | $53 \%$ | $16.90 \%$ | $\$ 58,515.19$ | $36.10 \%$ | $21 \%$ |
| $\mathbf{2 0 0 0}$ | $7.90 \%$ | $24.70 \%$ | $\$ 72,968.44$ | $-16.80 \%$ | $-9.10 \%$ |
| $\mathbf{2 0 0 1}$ | $69.60 \%$ | $58.10 \%$ | $\$ 115,363.10$ | $11.50 \%$ | $-11.90 \%$ |
| $\mathbf{2 0 0 2}$ | $-4 \%$ | $20.20 \%$ | $\$ 138,666.45$ | $-24.20 \%$ | $-22.10 \%$ |
| $\mathbf{2 0 0 3}$ | $79.90 \%$ | $11.10 \%$ | $\$ 154,058.42$ | $68.80 \%$ | $28.70 \%$ |
| $\mathbf{2 0 0 4}$ | $19.30 \%$ | $1.50 \%$ | $\$ 156,369.30$ | $17.80 \%$ | $10.90 \%$ |
| Avg. | $\mathbf{3 0 . 8 \%}$ | $\mathbf{1 8 . 5} \%$ |  | $12.3 \%$ | $12.4 \%$ |

* The "market average return is an equally weighted index of our 3,500-stock universe. Each stock in the index contributes equally to the return. The S\&P 500 index is a market weighted index of 500 large stocks. Large stocks (those with the highest market capitalizations) are counted more heavily than smaller stocks.

Slide 4:

| Largest 1,000 Stocks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Magic Formula Results |  | Difference |  |  |  |
| Year | Magic <br> Formula | Difference | $\$ 10,000$ | Market <br> Average | S\&P 500 |
| 1988 | $29.40 \%$ | $9.80 \%$ | $\$ 10,980.00$ | $19.60 \%$ | $16.60 \%$ |
| 1989 | $30.00 \%$ | $2.40 \%$ | $\$ 11,243.52$ | $28 \%$ | $31.70 \%$ |
| 1990 | $-6.00 \%$ | $1.10 \%$ | $\$ 11,367.20$ | $-7.10 \%$ | -3.1 |


| $\mathbf{1 9 9 1}$ | $51.50 \%$ | $17.10 \%$ | $\$ 13,310.99$ | $34.40 \%$ | $30.50 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 9 9 2}$ | $16.40 \%$ | $6.10 \%$ | $\$ 14,122.96$ | $10.30 \%$ | $7.60 \%$ |
| $\mathbf{1 9 9 3}$ | $0.50 \%$ | $-13.90 \%$ | $\$ 12,159.87$ | $14.40 \%$ | $10.10 \%$ |
| $\mathbf{1 9 9 4}$ | $15 \%$ | $14.80 \%$ | $\$ 13,959.53$ | $0.50 \%$ | $1.30 \%$ |
| $\mathbf{1 9 9 5}$ | $56 \%$ | $24.50 \%$ | $\$ 17,379.61$ | $31.40 \%$ | $37.60 \%$ |
| $\mathbf{1 9 9 6}$ | $37.40 \%$ | $-78.80 \%$ | $\$ 3,684.48$ | $116.20 \%$ | $23 \%$ |
| $\mathbf{1 9 9 7}$ | $41.00 \%$ | $21.40 \%$ | $\$ 4,472.96$ | $19.60 \%$ | $33.40 \%$ |
| $\mathbf{1 9 9 8}$ | $32.60 \%$ | $22.70 \%$ | $\$ 5,488.32$ | $10 \%$ | $28.60 \%$ |
| $\mathbf{1 9 9 9}$ | $14 \%$ | $-20.70 \%$ | $\$ 4,352.24$ | $35.10 \%$ | $21 \%$ |
| $\mathbf{2 0 0 0}$ | $12.80 \%$ | $27.30 \%$ | $\$ 5,540.40$ | $-14.50 \%$ | $-9.10 \%$ |
| $\mathbf{2 0 0 1}$ | $38.20 \%$ | $47.40 \%$ | $\$ 8,166.54$ | $-9.20 \%$ | $-11.90 \%$ |
| $\mathbf{2 0 0 2}$ | $-25 \%$ | $-2.60 \%$ | $\$ 7,954.21$ | $-22.70 \%$ | $-22.10 \%$ |
| $\mathbf{2 0 0 3}$ | $50.50 \%$ | $9.10 \%$ | $\$ 8,678.05$ | $41.40 \%$ | $28.70 \%$ |
| $\mathbf{2 0 0 4}$ | $27.60 \%$ | $10.30 \%$ | $\$ 9,571.89$ | $17.30 \%$ | $10.90 \%$ |
| Average | $22.90 \%$ | $11.20 \%$ |  | $11.70 \%$ | $12.40 \%$ |
| "Thark |  |  |  |  |  |

* The "market average return is an equally weighted index of our 1,000-stock universe. Each stock in the index contributes equally to the return. The S\&P 500 index is a market weighted index of 500 large stocks. Large stocks (those with the highest market capitalizations) are counted more heavily than smaller stocks.


## Magic Formula Results by Decile



Top 11 Companies with Mkt. Cap > 2 Billion \$ as of 11/11/05

| Company | Ticker | Mkt. Cap | Pre-Tax Earnings <br> Yield | Pre-Tax ROIC |
| :--- | :---: | :---: | :---: | :---: |
| 3M Co | MMM | 58.6 | $8 \%$ | $50 \%-75 \%$ |
| Affiliated Comp Svcs-CL A | ACS | 6.97 | $8 \%$ | $50 \%-75 \%$ |
| American Standard Cos, Inc. | ASD | 8.2 | $9 \%$ | $25 \%-50 \%$ |
| Amer. Eagle Outfitters | AEOS | 3.9 | $13 \%$ | $>100 \%$ |


| Amphenol Corp | APH | 3.5 | $8 \%$ | $50 \%-75 \%$ |
| :--- | :---: | :---: | :---: | :---: |
| Aramark Corp | RMK | 4.6 | $9 \%$ | $25 \%-50 \%$ |
| AT\&T | Ticker | 15.9 | $14 \%$ | $25 \%-50 \%$ |
| Autoliv Inc. | ALV | 3.7 | $12 \%$ | $25 \%-50 \%$ |
| Autozone Inc. | AZO | 6.6 | $12 \%$ | $25 \%-50 \%$ |
| AVON Products | AVP | 2.7 | $9 \%$ | $75 \%-100 \%$ |
| Block H\&R | HRB | 7.9 | $13 \%$ | $>100 \%$ |

## Million-Dollar Magic by James Boric

Joel Greenblatt is not famous...He is merely rich.

Last week, I discovered why he is so rich. My discovery could easily put a few extra dollar bills in your pocket as well...Maybe even millions of dollar bills.

Joel Greenblatt is a Harvard Business School graduate, but let's not hold that against him. He is also the founder and managing partner of Gotham Capital, a private investment firm established in 1985. He started with $\$ 7$ million of outside capital - mostly from junk bond king Michael Milken. Over the next decade, he earned $50 \%$ a year - compounded. Even after paying back all of the original seed capital and factoring out expenses, Greenblatt grew his $\$ 7$ million stake to over $\$ 350$ million. A mere $\$ 1,000$ investment was worth $\$ 57,665$ in 1995. A $\$ 10,000$ investment was worth more than a half a million dollars.

So when Greenblatt took the podium at the recent Value Investing Congress in New York City, I listened...intently.

Greenblatt declared that he had a simple two-part investment process that could deliver far greater returns than the rest of the market. He called the process his "magic formula." I thought to myself, "Wow, that's pretty corny...but maybe there's something to it anyway." As it turns out, there is.

Greenblatt's formula relies on a "value-oriented" process that ranks stocks on the basis of two variables - the earnings yield and the business's return on capital.

The first part of his formula requires that a stock trade for a bargain price relative to earnings power (or yield). The idea is simple. If, for example, a company can't earn more than $5 \%$ a year - the return you would receive from 10-year U.S. Treasury note - it isn't a business you want to be in. Quite simply, it isn't cheap relative to the risk you must take.

To calculate a company's earnings yield, you divide its annual earnings per share by its share price. For instance...If a company earns $\$ 1$ per share for an entire year and its stock price is $\$ 10$, its earnings yield is $10 \%$. Since $10 \%$ is double the return of a 10-year Treasury, it may be a company worth looking into. But if you find a company in the same industry that earns $\$ 2$ per share and trades for $\$ 10$, that may be an even better investment opportunity. It has an earnings yield of $20 \%$ ! Obviously, the higher the earnings yield, the better the bargain.

But earnings yield is only one half of the magic formula. Investors must also ask a second question: Is the business a solid one? The last thing you want to do is to buy stock in a company that is cheap for a good reason - because it stinks.

Greenblatt determines whether a company is "good" or not by looking at its return on invested capital. In other words, is it investing its capital wisely - adding to its earnings power? Or is it wasting its cash on frivolous investments that will create no (or even negative) value for shareholders moving forward? For instance...

If a company spends $\$ 1$ million on a new factory and it is able to crank out an additional $\$ 500,000$ in profits the next year, the result is a $50 \%$ annual return on capital. That's outstanding. It says management knows how to spend YOUR shareholder money to create added value. Clearly, companies with high returns on capital will grow more quickly than companies with low returns.
[Editor's Note: By the way, Greenblatt has authored a terrific book about his magic formula entitled, "The Little Book that Beats the Market." He has also created a Website dedicated to the process, which may be found at www.magicformulainvesting.com. For the record, we have no business association whatsoever with Greenblatt. We are merely providing this information as a courtesy to you].

So Greenblatt wondered how much money you would make if you invested ONLY in good companies (those with a high return in invested capital) that trade for a bargain price (companies with high earnings yields).

To answer that question, he researched the historical returns of the stocks his magic formula would have identified. Specifically, he went back and examined the top 3,500 American stocks (from your large behemoths like Microsoft on down to micro cap companies with market caps of $\$ 50$ million) from 1988-2004, according to his formula's ranking system. He ranked each stock in terms of earnings yield and return on capital - from 1 to 3,500 .

The idea was to invest in the companies with the best combined score - those with the highest earnings yield AND the highest return on capital. So if a company ranked 100th in terms of earnings yield and 50th in terms of return on invested capital, it got a score of 150 . And if another company ranked 6th in terms of earnings yield and 10th in terms of return on capital, it got a combined score of 16.

After generating a score for each company, Greenblatt created a portfolio of the top 30 companies. Greenblatt created a new "Top 30" at the beginning of every year within his test, and then calculated the return an investor would have received by investing in each year's top-30 stocks.

From 1988-2004, if you had bought the top 30 companies generated every year using Greenblatt's formula, you would have averaged a $30.8 \%$ return for 17 years. During that same time frame, the market averaged a $12.3 \%$ return.

So Greenblatt's ideal portfolio (using his two-part formula) beat the market by almost three times over. And it gets even better...

There was NEVER a three-year period between 1988 and 2004 where this portfolio of 30 solid, bargain stocks was not profitable. Indeed, there was never a three-year period in which it failed to beat the return of the S\&P 500. In other words, an $\$ 11,000$ investment in 1988 in Greenblatt's magic formula stocks would have been worth over \$1 million by 2004.

As a small-cap specialist, I was particularly intrigued by the fact that the small-cap value stocks within Greenblatt's system dramatically boosted the overall results. For example, when Greenblatt excluded the smallest 2,500 stocks from his sample universe of 3,500 , he discovered that his magic-formula portfolios produced an annual return of "only" 22.9\%. That result was still far better than the S\&P 500's, but the not nearly as good as the $30.8 \%$ annual returns that resulted when the mid- and small-cap stocks were included.

In other words, small cap value stocks are some of the market's most valuable stocks of all. So I wondered, what small-cap companies in today's market would meet Greenblatt's stringent value criteria? I ran some numbers of my own, and came up with 10 companies that had at least a $25 \%$ return on capital and an earning yield north of $9 \%$. Check 'em out...

## November 30, 2005 Review Class

The test next week will be closed book.

The purpose of today's class is:

- We will do some review for the exam
- We will discuss portfolio management which we haven't talked much about it.
- We will then discuss anything from the book-I assume you have read it.


## I. Questions about the book, The Little Book that Beats the Market.

Student: Does Ebit = Ebitda - Maintenance Capital Expenditures (MCX) used in the book?
JG: Right, I put a little note in there for the MBA Students in the book. I assumed MCX = D\&A for simplicity purposes. Figuring out MCX for a lot of these companies is pretty hard. On average it (using EBIT) is pretty close to being right for simplistic purposes. If I were doing it myself, I would check to see the true MCX and subtract that number from EBITDA. You might use EBIT as a check to see if you are close.

Student: When your sister, Linda Greenblatt was here she said that retailers were great to invest in due to their price swings (high price volatility allows for advantageous purchases). Real Estate swings. Were there any other consistent sectors in your database that kept showing up?

JG: There was no particular exposure, but there were a lot of consumer exposure in general because those businesses depending upon whom was doing the categorizing do not require a lot of capital to earn their returns (A low capital return model).

The big picture here is the not trying very hard model, right? You sort of use last year's earnings and you do not make heroic assumptions, and you do not use very many factors. It shows how powerful the basic concept is.

I had fun with this because I read a lot of the academic journals (on finance) because I am a wild and crazy guy. Four years ago they took some firms in efficient markets. Everything has to be laid out in that context (of efficient market theory). They (academics) have never really gotten off that. It is pretty amazing how you can argue in the face of so much information that you can beat the market doing something this simple. (Though ships will sail around the world for centuries, the Flat Earth Society prevails- Warren Buffett).

I wrote the book for the masses-that was the audience for this book. If you can really insert your estimates of normalized earnings that would be so much better. The fact is that some of you will find some companies that you feel confident in doing that means that if it works this well doing nothing, to work well actually thinking about it as long as you don't get messed up with the emotions when it is not working out for you.

Student: How do you compile the stocks every year? How are stocks added or eliminated? How does that change from year to year?

JG: How is the portfolio purposely constructed? I left that purposely nebulous because it was complicated. The basic idea is that there is always a 30 stock portfolio, and you accumulate that portfolio over time so that each stock was held for a year. We started in Jan. 1988 and although we assumed we started buying stocks in Jan 1987 with some stocks held for 6 months and some held for nine months etc, as I described in the book, I suggested that you bought six stocks every two months until there were 30 stocks accumulated in the portfolio over the year by Jan. 1988.

As I described in the book we used a step-by-step process. We had stocks held for three, six, nine months, etc. In year two you will have 30 stocks, starting in year two you have thirty stocks in the portfolio then you sell six stocks and bought 6 new stocks. What I described in the book for a thirty stock portfolio you would be buying 6 stocks every two months. Then you would sell stocks held for more than a year. Think of starting in year two and that is how we started measuring the 30 stock portfolio.

Student: Was there any reason you picked $\underline{1988}$ for the starting year?

JG: Yes, we used a database called Compustat point-in-time database which was the exact data that someone would see back then. I said in the back of the book these were the reasons things get attacked and one of them is survivorship bias where they just take bankrupt companies out of the index so you have a bias to do well because you got rid of the loser. Here this was the exact data the Compustat customer had at that point in time and it only goes back until then (1987). So we went to the beginning of the database. You could argue that it might not have worked, but we didn't want to have any argument and this is the easiest database to use because the data is very uniform.

There are many, many problems, and the reason we set up the www.MagicFormulaInvesting.com. Website was because I didn't want to write the book and then we didn't want people to use crummy databases and people have to plug in all the formulas. People would be trying to program tangible capital and all those kinds of things. So I had planned to use Business Week's data base but it doesn't use Compustat data (though it is owned by $S \& P$ ). So I felt kind of obligated to do this because the readers would not have accurate or easily obtained data to use the Magic Formula and then they go buy the wrong stock. We tried to make it as simple as possible.

Student: Did you think of using two year's data?
JG: That is a good question. In other words, I say it is a good long term strategy and I say to turn it (the portfolio) over ever year-one, a year was simple and two, to take losses in less than a year for short term losses and two, to take profits after holding the stock for a year for a long term gains especially if you were an individual. It works well using two year old data as well.

We are using last year's data instead of using projections. After a year you have fresher data than a year ago and that always makes more sense than using two year old data. We thought a year was as good as anything else for tax reasons and for turnover costs it was a compromise to a longer term (two years or more) strategy. And we wanted to keep it simple.

Student: The lowest deciles were the most risky? Did you notice a number of companies going bankrupt in the lowest deciles? Are the lowest deciles the most risky? Some stocks in those deciles tripled and some went bankrupt?

JG: No. We are buying high ROIC stocks earning a lot of money, companies that are earning money. We are not choosing low price to book stocks. Their argument goes out the window. We didn't see much. (Academics might say Magic Formula Investing Stocks will do better because of the higher risks inherent in the stocks). And there isn’t much in the low price to book results as well. (Academics say) "It (risk) doesn't come out in volatility where they (Academics in finance) measure risk everywhere else so it must be some other risk because our theory can't be wrong. It is patently ridiculous. At the end of class I will tell you what I really think. (Laughter). One thing I did slip in the appendix is that if we are valuing stocks based on future earnings, discounted back....why would low price to book stocks be important. ....(garbled)

Low price to book stocks are a subset of stocks that are super cheap and are already out of favor. A subset of stocks that are cheap will trade close to book value but that is not why they are cheap. They just happen to be cheap-it is an indication they may be cheap. So a more direct way to test whether a company is cheap: Does it earn a lot relative to what I am paying and is it in a good business? This should work a lot better than low price to book stocks.

Low price to book is just a subset that you would tend to get and actually the Trosky Study show less than half of the low price to book stocks beat the market but the ones that do beat it by a lot. So what he tried to do is throw out some of the worse low price books stocks to see if he improved which he did. But his methodology did not work for large cap stocks. I think that is the beauty of this (Magic Formula) one. That was why we did the large cap stock study which worked well for us-22\% average annual returns for large cap stocks over 1988 to 2003 testing period).

Student: Do you remove cyclical (stocks) from your study? Couldn’t you be buying cyclical stocks at the worst time because their earnings would be peak earnings, giving you a high earnings yield?

JG: I wouldn't say that. I wouldn't say that. In most cases.....What we try to do here rather than.... This is the thing that we tested first and it worked. We didn't test many things to pick the one that worked, which is comforting because it shows that logic works. This is the not trying method.

You don't want to put too many factors in there. I actually got an email from O'Shaughnessy who wrote, What Works on Wall Street." I beat up on him in my book. The only one left on the list is Haugen who has a 72 factor model (requiring monthly turnover!) that doesn't work as well as the two factor model. So one down and one left.

Student Did you consider leverage?
JG: No I didn't, but EV/EBIT includes leverage. All the studies done in the past-the low P/E studies--are not low EV/EBIT. When I gave you those passages to read and that guy (Hooke, the author of Security Analysis on Wall Street) said take what you get regarding capital structure so use P/E as opposed to EV/EBIT. I said that I didn't agree with that. I think it is very clear through statistics that on average, this is much better. So that helps in that analysis.

I try to explain why this works in the book but I have to be frank, I was quite amazed at how well it worked.
JG: Who thinks I was an idiot to write this book in the first place?
Student: Laughter. Will the Magic Formula diminish over time?

Investing is like dieting. It is easier to know what to do than actually do it? There is a pretty strong argument that not many people will be able to follow this. It probably might diminish somewhat.

JG: Low P/E hasn't (diminished as a value metric) but low price to book (P/B) has. But low P/B really didn't make much sense to me. I think one reason low price to book has diminished over the years is that the economy has been less asset based earned and more services industry oriented over the last 15 or 20 years. So that the companies that are trading closer to book value with a lot of assets to generate earnings are some of the worse companies to invest in. Negative results from low P/BV. That is one of the things that I am banking on. This method like the low P/E strategy won't diminish and hasn't diminished over the past 40 years. The strategy to buy high earnings yield (Low EV/high Ebit) companies which have high ROIC (high EBIT/Low Invested Capital) should remain robust.

The other thing I am banking on is that if you look at the top of the list (of Magic Formula Stocks) they are hard to own. How I know why these stocks are trading there-bad near term news abounds. There are not too many takers to buy. So I think as long as.....

Even if you look at the Haugen study where he had with 71 factors (of criteria to buy superior performing stocks) and he wrote a trilogy of books--all of them worth reading with various benefits with each. (See shaded segment on page 22). One of them had to do with his 71 factor model, and he shows you the top ten factors that he used and six of them were low P/E and high ROE. It is not that quants don't have this stuff (on what quantifiable criteria outperform the market). The average guy doesn't. Then you have to decide, does it work with the analyst working with big companies who set prices or computer robots?

The reasons that Quants go out of business is because they have to keep reinventing themselves-the quantitative model. They find anomalies that work for a day, a week a few weeks whatever and they may converge the way they are supposed to go. And if you look at the results here for the simple model (for the Magic Formula) and in 2002 the model is down $25 \%$ and the market is down 22\%, but people can't eat that volatility. If things converge quickly, the people have patience. If things converge slowly over a year or two years and things go badly in between, people don't have that patience. It is very hard for people to adopt that model (of Magic Formula Investing).

People don't have to patience to wait for convergence. It is very hard. You can imagine if this doesn't work this year people will say this (method) doesn't work either.

For example, my daughter-she--started in August and my son started in March but their results differ because of their starting periods and the stock chosen in that period.

Student: Long term expectation? What would you think for this to go away? Or because people are irrational, this will never go away?

JG: That is what I am hoping for. I assume human nature doesn't change.
Student: What would it take for this to go away that is the real question?

JG: I think it would be very hard, because like I said it is very, very lumpy (returns) so that.... There will always be things going out of favor. There are two ways this works. One of the ways which is what I said in the book. Good companies at cheap prices. I think that is certainly true for the first and second deciles and why they outperform the last two deciles. I think it is very clear on average that is what you are doing.

When you get into the top tier (deciles) of companies, you are working more as an insurance company (so you need a pool of bets to have the odds more in your favor). Individually it is hard to own them because they are out of favor and they may work out or they may not. But as a group on average there are enough winners that work out. So you are really taking an insurance group bet rather than an individual stock bet. There will always be stuff out of favor and stocks will be priced that way until the quants take over the world. And when the quants take over the world, it stops working. Then it will work again because the quants will be out of business.

But generally.....If you think about what a quantitative model is-it is just a bunch of numbers to somebody and it blows up at some point and then you don't know whether it blew up or things had changed or you are doing the wrong thing. You are actually analyzing companies. Frankly that is (figuring out normalized earnings) my day job and your day job because you can do it. This is for the guy not doing any work. My day job is figuring out what normalized earnings are and plugging it into the model--not looking what happened last year. This is sort of an easy thing for people to do. As far as making money in the future, there is always stuff that is in and out of favor. Human nature doesn't change.

Student: This can never go out of favor?
JG: In ten years? I am not expecting it to, no. I think that is a fair assessment.

## Evaluating Managements

The main point is not to memorize rules. Because people ask me about this--evaluating management-throughout the semester, but I am just trying to evaluate how certain people will act in their own best interests. How is this guy incentivized? I try to use logic. What is his incentive to do this? If people are not incentivized to do a good job they generally won't do it. There are some great people in the world that will do the right thing regardless of incentives but on average human nature prevails. You must expect people will act in their best interests and know how they are incentivized. I would go in expecting that.

What percentage of the company is best to own? It is either a strong point for the company whether management is incentivized well or not. Do they keep stealing as much as they can and keep blowing it out? If they are buying back stock over the last five years, I assume it is cheap or they wouldn't do that. .

Student: Portfolio managers won't want to hold these types of stocks (Magic Formula Stocks with "bad" near-term news) in their portfolio?

JG: Richard Pzena, when he is selling to institutions and telling them what he owns, they say to him, "Don't you read the papers?" Because there is something wrong with his companies. For some it is a sale and for others it is a negative.

It is hard to do the stupid thing and lose-that is the hard thing. If it works, everyone is happy.

Student: You think the majority think that way?
There is too much uncertainty or things will turn down. There is too much uncertainty. It is tough. Things are down. You say, "Oh, I knew that stunk and now it is down from $\$ 33$ to $\$ 25$. It is not usually the time when guys say let us jump in here.

I do not think about what others are doing or thinking. Just think about what you should be thinking. To cut to the chase the idea here is to cut out the extraneous stuff. It becomes a very simple process. Forget about what he thinks or what is happening next. Figure out what the darn thing is worth and buy it for less. To figure out what it is worth then figure out what are normalized earnings down the road. Not what happened last year or this year or next year? Most of the time you won't be able to do that. May be the business is too uncertain or too tough or you don't really know. But if you can do that in the companies you do know, that is the whole analysis.

It looks cheap enough, and we are getting paid to take our position. Unless the stock bottoms, we have never bottom ticked a stock. Usually it doesn't work out so well.

You know you have something great when you are rooting the stock down after you have bought a lot. That doesn't happen that often where you have that confidence.

Student: On small amount of money—those transaction costs will add up.
JG: I was thinking about the IRA investor who can put in $\$ 4,000$ the first year into an IRA so I am figuring that is pretty much the minimum (amount of investment). There is this site called www. FolioFN.com so you can buy stocks at 19.99 per month. The cost is $6 \%$ in the first year or $\$ 240$ a year for a $\$ 4,000$ portfolio which is the smallest suggested beginning portfolio size.

Or you can do Scott Trade which is $\$ 7$ a trade and you can buy 20 stocks the first year which is $\$ 140$ per year. The advantage for you is that you can do small caps.

But you are right, and I was concerned about that. You can do small caps which have done 18\% a year better than the market during the study period (1987 to 2003) and that will take care of a lot of the transaction costs as the account grows. (Note: Small Caps are not necessarily on average more undervalued but they are subject to more mis-pricing of either being more overvalued or more undervalued).

Right now the first time in 25 years I am finding better bargains in the large cap area. Though it works great for large caps so that is the best argument.

If you think of other questions. $\qquad$

I thought one of the most interesting things was on the last page where we talked about the Haugen model which was a 71 factor model and it involved turning over the portfolio every month. They did comp to the two factor model. His difference between 1 and 10 was $17 \%$ and the difference for the two factor model was 5 percent and change. That was very powerful. His worst 36 month period was minus $40 \%$ and the two factor model was plus $14 \%$. So I thought that was good.

## Portfolio Management

I also talked a little about Portfolio Management so I also think we should talk about that a little bit now.
When you guys get out of here (Columbia Graduate Business School) it might be difficult to:
A. have the confidence to own 5 to 8 stocks and
B. Have someone who is crazy enough to let you do that.

I imagine you can do that in:
A. your personal account and
B. where you have control over things

There is an argument to have a very concentrated portfolio. You really are buying pieces of the business. The way I look at it. Think about it as your own business where you own percentages of other good businesses that you researched well and bought at a discount. And if you can buy it for 50 or 60 cents on the dollar you wouldn't worry about where people were pricing it all day long.

All the measurements you would get in a traditional MBA in how to do portfolio management would look silly. What happens in the institutional business? When they put out money to money managers, they don't go inside the portfolio (the pension fund managers, for example, don't know the reason why those particular stocks were purchased by the fund manager). They don't have transparency, they don't know why you bought those stocks, and they only know that your returns bounce around. If that is all you have-just the numbers-I understand the process could take longer than three years to work out. If your numbers are no good why should I pick you? Sort of like Warren E. Buffett (WEB) "I look for 7 foot basketball players."

It is sort of the same concept. If someone has not done well for three years, you should ditch them to go with people who have done well. If it is not working well now, then why will it work now or in the future?

I am on some institutional (investment) boards and that is the thinking. That is the great thing. The guy, who doesn't do well over three years, so he has to sell all his stuff because his money is pulled-so his stocks get even cheaper. (Ironically usually just before the turnaround). You can see the institutional reason why this does happen.

The best example, annual volatility then 10 year volatility, it is about equal to the market. Using trailing 36 months periods, Pzena's volatility is about half the markets' volatility. I am not a big proponent of either (measuring volatility).

Who cares how much it bounces around in the interim if returns are good? If you look at the statistics what are your draw downs during the course of the year? All of those measures seem a little silly when you own a share of a business at a good price.

Student: What was the one mistake over the past twenty years, you wish you did a little bit differently? What was your most common mistake?

JG: I will tell you something encouraging, I have done so many stupid things, and I hate to talk about them and I am not done-it brings up bad emotions. I have sold too soon and at wrong times. Yet, if you do enough stuff right you can still get great returns, I think that is encouraging. Believe me If I go back over the past 30 years and recount my mistakes-it is too embarrassing--but I did sell a stock at 25 cents that is now \$15. There was no logic to selling it. I was raising money. How much could I raise? If you knew how many mistakes I have made......not just selling too early though that is one that we often do.

I think I had a contest with Robert Goldstein, my partner. We made $60 \%$ to $70 \%$ on our money with Moody's and it unfolded exactly as we predicted, but the position tripled. We went back and forth for 30 minutes. What about all these stocks that tripled after we sold them? That was certainly one mistake we have made and continue to make.

Another mistake we have made: mis-assessment of a business and being in denial. But of denial was that we owned so much that we couldn't get out. It wasn't so much we couldn't get out.

We never worry too much about liquidity if I can buy it well. If I am wrong I should pay for it. Liquidity constraints in companies that we bought a lot of have more than paid for the ones we couldn't get out of. If you have a long enough horizon, over time it works.

Student: You do so much in the small cap area. How small (are the companies, stocks) do you look at?

JG: Right now the typical investment we own is in the multi billions. That is another great thing about investing in small caps which I think I mentioned before. The people who get good at this stuff, get wealthy so then they can't look at the small caps any longer. They go to the large caps. So there is always a new crop of people. There is always room to start there. I try to make it clear in the book too. It is not so much that small caps are better. (Small caps tend to be more mis-priced both on the up and down side).

That is another stupid thing that academics generally do.... They say.."Well, you left out this or you didn't include that. $\qquad$

I figure I will get attacked eventually because Academics will say, "You did not take out the small cap effect, the low price/book effect." They try to take out all these effects--but for that effect you equaled the mkt. But the point is that the small cap effect if there is one, they are too small to buy. But the small cap effect, if there was one, occurs because the stocks out of favor tend to have smaller caps more than the average stocks because their price is low.

I think a small market cap stock happens because it becomes out of favor. Same with low price book. The stock happens to have a low price to book because it happens to be out of favor. It is not cheap because it has a low price to book value. It is coincidental. It coexists. It is not a good buy because it is low price to book. As opposed to what this is--Rather than what I looked at--which was price relative to what the companies would earn. It makes more sense to me. It seems silly to me to just use low book value to price.

Student: Theoretically, the companies we work for will be firms that have billions of dollars of capital where we wouldn't be allowed to buy companies under \$400-\$500 million in market cap.

## The Purpose of the Course

JG: The whole point of this course is to give you a context in which to do your valuation work. All you are doing is valuing companies and trying to buy them for less. And then understand the context and how the market works over time. The market may not agree with you in the short term, but you have to stick it out to get right.

## All you are doing is valuing companies and buying them for less. And then what is the global context

 you are looking at? If you are valuing large companies, then figure out the cash flows. It is no different than for small caps. There is no line drawn somewhere. Large caps tend to be better, more established companies, and therefore, they are not one product companies. They have maybe a stronger market position than small companies but you might look at the same attributes. It might be a small niche market that the large company has a great share in that market.It is all about valuing companies no matter how many studies I blabber about. If you can value companies and buy them cheaper and have the context to know that 2 plus 2 equals 4 , then that is all you need-forget the rest. If you can buy good companies that are making money over time at a discount, you will make money. That is really what this course is about.

Putting things into context which I am good at and doing the valuation work which I think I am average at. But I am very picky, and I pick the things I know how to evaluate. And I think all of you can do that because you are all here.

I might flounder at a big firm because my guess on a particular industry might be no better than anyone else because I don't understand the dynamics of that industry. But it is a good process. If you learn three or four industries. Linda (Greenblatt) has made a good living knowing one industry, retail. One industry you understand in your bones like manufacturing because that is your background. It is the Warren Buffett circle of competence concept.

Bill Miller (portfolio manager of Legg Mason's Value Trust) is an extraordinary example is someone who has expanded his circle of competence to companies you generally don't look at. He is trying to figure out what a company is worth and buying it for less. He is trying to understand what people consider very complicatedGoogle, Amazon, EBay.

## Student: What do you look for?

JG: I am always looking for a disparity between what it is worth and where it is trading. Then what are my alternatives? Right now because we have some big cap stuff, we are fully invested. I am worried about the indebted consumer. We were scared in 2000 also. We owned a lot of companies earning a lot of money. We knew the Internet bubble would burst also. The S\&P 500 dropped in half. There are not many times in your life that will happen, I guarantee it. We were up $100 \%$ in 2000 and the market got pummeled. That is sort of what we are doing now. We are fully invested. If we found something else we would sell something else because we don't use leverage.

## Leverage

If you are going to be a very concentrated investor, you should not use leverage. WEB said you make a lot of money if you only had a 20 card punch card with 20 choices. I will give you a 20 -hole punch card for the next ten years to help you be disciplined.

You can't leverage because you need to live through the downturns and that is incredibly important.
Big picture--the things I look at: What I have in my portfolio. This is just practicing now. You have 6 securities in it, and you are $100 \%$ invested. Now if we find something else we like--it has to boot something else out of my portfolio. We run a fund of funds. And we found a money manager from the VIC. He ran a fund with 30 names because he wanted to sleep well. But he was smart and he had a big staff so he could source a lot of ideas. He had insights we didn't have.

We came up with a way to work with him. We said, "Listen we only want your five best ideas not 30. If you want to add an idea, you have to sell the other." What are your five favorite things at a time? I would recommend to you a 6 to 9 stock portfolio. It is a way to get rich actually. It is a very disciplined strategy to always keeping the best ideas in your portfolio and concentrate. Only keep the best things in your portfolio. WEB says he has more money than ideas, but I don't think you will have that problem for a while. If you do, please look me up.

Student: Is there anything else you look at?
JG: One thing we did not emphasize enough which is inherent in what we are doing because we are buying stocks cheap. Look for asymmetrical risk reward investments. It is inherent in what we do. Following the margin of safety principle we are looking for good risk reward-- a dollar down and five up. The stock is worth ten and you can buy it $\$ 5$ but the stock could go down. You certainly are not going to buy a large cap stock now at a 50 cent dollar. The way I would look at a 50 cent dollar, "Well I am going to hold this for two or three years and in two or three years with the accumulation of cash it will be worth $\$ 10$ but I can buy it for $\$ 5$ or $\$ 6$ now." That is a pretty good return. Sometimes it happens sooner and the market fast forwards those earnings upfront. Perhaps the market will recognize what I am seeing sooner.

It is interesting because we talk to our portfolio managers a lot. One of the things we bring to the table is that we can help the portfolio manager. We met a guy who ran $\$ 100,000$ in 15 years into $\$ 25$ million ( $\mathbf{4 4 . 5 \%}$ CAGR for 15 years!) never running outside money. We convinced him to run money for us. One day he went through all the metrics of the company and it is worth $\$ 10$ where the stock is trading at $\$ 4$. We said, "Everything you said makes sense, which sounds great. "And one other thing," He said, "they just put the company up for sale." So this sounds really good to me. Right?

Why do you only have $7 \%$ of your portfolio in it instead of $20 \%$ ? If you were not lucky enough to buy at $\$ 2$ would you buy a hell of a lot more at $\$ 4$ if you hadn't been so lucky?
He said, "I see your point." The next day a big block of stock comes up in the stock and he tripled his position. Three weeks later the company is taken over for $\$ 9$.

All the stuff I say...People accuse me of trying to make it seem all too easy. It really is not. When you look at these results (Magic Formula Stocks up $34 \%$ and $22 \%$ ) over seventeen years, it seems obvious. When you are
in the trenches and you are living through the year and a half and it sucks, it doesn't seem so obvious. Why am I an idiot? It is different. It is much easier to look at an accumulation over time or an average and say that it is obvious and it works.

The same thing in portfolio management. There is all the psychological things like anchoring, the price you pay. These things naturally go on. I think the clearer your thought process, the better. Which is: It is worth this it is trading here, I have this much confidence in my opinion. You just keep going back to basics. The basics are the market will get it right eventually in three or four years and I have to hang out. If I am wrong, I will be wrong some of the time. If I am wrong a lot of the time, I have got to find another line of work. Or I have to find some industry that I do know how to value and that is the learning process.

## The Hard Part

Student: What is the hard part?
JG: I think the hard part is limiting yourself to those companies that you can figure out the normalized earnings. I only limit myself to those companies I can figure out-or are easy to figure out--the normalized earnings.

Student: Over time what is the difference in this methodology compared to your first book?
JG: It depends where the opportunities lie over time. I didn't get turned on to WEB's focus on good businesses until the early 1990's. I got burned in crummy businesses. If there is $\$ 10$ in value and it is going to $\$ 12$ then great, but if it is going to $\$ 8$ then your margin of safety is degraded. Time is against you instead of working for you.

Student: This 20-hole punch card is for the purpose of making great 20 investments?
JG: Put half your portfolio into stocks using your punch card. You put in 10 ideas and you hold them 1 to 3 years. As I have gotten older, slower and working less hard, I have extended my timeframe and increased my concentration.

I don't know if you have done the math. You will use up your twenty picks. It really is more of a reminder that less is more. You can only focus on your best ideas. If you don't think it is great, then pass. Your opportunity set is not what is in front of you. The future is unknown. But your opportunity set is not in buying what is the best out there today, but what might come along if you wait. I am really losing an opportunity to buy when there is a great opportunity. There are times when there are huge opportunities and it is good to have dry powder.

I am giving you metrics--your hurdle rate should be very high, you should be really confident. Load up on your best opportunities. What I consider loading up is more than most people. We put $20 \%$ to $30 \%$ of our capital into an idea. We look at it (an equity position) as owning a piece of a great business.

When we found a great idea is was because we did the work and we found it in an unusual spot. "Oh, it is trading cheaply because this division could be closed down then the value will be revealed. It is not like we figured out Google.

Two more questions and then we will take a break.
Student: Are you fully invested?
JG: We have seen a lot of good opportunities in the last six months.
Should I have sat on my hands? Sometimes we are fully invested and are looking. The thing you bought goes down and the thing you sold goes up, but I have learned to ignore the pain.

That is the key! You must think two or three years out when everyone is thinking about the next quarter.

WEB was spoiled by Graham to find only cheap stocks.
JG: To me it took me a long time to get to a long time horizon because there were a lot of neat things to do. You can make money at both. You have more weapons in your arsenal. . It is all the same thing. You get values coming out of weird situations.

BREAK............ 107

## Final Exam

JG: Why don't we talk about the final? The final is designed to test your analytical skills. Some questions are a matter of opinion. The point is to touch on the right points.
I might ask for strategic advice after you have seen the $10-\mathrm{K}$. Some general questions about the speakers we had.

You have to figure out an arbitrage spread. You have an option question.
I am the easiest grader in the school. I keep your test in my file so I can answer questions about you if anyone asks me.

I like people in interviews to disagree with me. Pick up the issues and argue well.
We saw speakers: Matt Mark, Robert Goldstein, Richard Pzena, Linda Greenblatt, Brian Gains and Bruce Newberg.

## Comments on student papers:

In general I thought your papers were very good. I will tell you your true grade-the grade you should have gotten-versus what I put on your paper. These are somewhere in between but in general they were good.

110: A couple of comments $\qquad$
Comparables and Valuations
A student presented five different types of value:

- EV/EBIT,
- Price/Sales,
- liquidation value,
- Private transaction value
- and one or two others

Then he averaged the five. I say pick one-something that is more relevant. If they are all in the same range, it doesn't matter. Just picking an average doesn't mean much. I think the same thing with relative valuepicking comparables. A lot of people just list a bunch of comparables. Even if some did the ROIC and EV/EBIT analysis and compared and that is good. It is much better than doing P/E ratios where there are different tax shields and everything else. But those eight or ten companies were not really great comparables necessarily. I would still pick out the businesses the most likely to be similar and do comparables on two or three companies instead of an average of 8 or 10 . I think that might be more useful rather than just getting the job done.

There are other companies that don't have good comparables, but cash is cash and what I would do on that.....You know I gave a speech at Stanford Bernstein to the young analysts there (50). It is kind of great and sad in a way but I get these kinds of questions. An analyst raised his hand and said, "Well I do tech stocks. Those are valued differently than the others so how would I go about valuing them?" Well, I said, cash is cash, and you are valuing the earnings stream--they are all green. It depends upon your confidence level and
everything else. It is in the way you get into an institutional mindset and they are still doing it that way. Sanford Bernstein is a great place. One of the advantages you have is thinking straight.

If you can't find a good comparable, then try to find a comparable business with similar metrics like returns on capital and similar growth prospects. Rob Goldstein (his partner) compared Moody's to Coke when Buffett bought it because there were attributes to those businesses that were similar. There were differences and similarities, but it is nice to have a benchmark of some sort. So if you can't find a good comparable within the industry of what you are trying to do, compare it to a comparable with similarities. You have confidence in those cash flows, the ROIC in that business.

So that is what I would look for. That is how we have made a lot of money over the years where people only view this industry a certain way. But, hey, things can change, but it is spinning out cash. Maybe it will get revalued. Look at these two metrics, they match up. This is trading at $\$ 25$ to $\$ 30$ and this is trading at $\$ 12$. So that doesn't continue to last that long if they do continue to spit out the money, you have to wait two or three years, but that is a really, really powerful model to find a comparable when you don't have one. Or to analyze an industry a little differently than it has traditionally been analyzed. The industry might be efficiently priced relative to each other, but they all could be cheap. People are not used to paying for

People just used to pay only 10 times for banks, but then people started to pay more for them because they were earning more as businesses; they went into different businesses.
If it is tough finding comparables find something similar in market share attributes and prospects.

## Retailer:

They said, the average $\mathrm{P} / \mathrm{E}$ over the past five years was this or the highest $\mathrm{P} / \mathrm{E}$ over the last five years was that, and I think the price will go back to that. That doesn't make sense sometimes because the business could have been much different with different growth prospects back five years ago. Now the company is in 1000 malls and five years ago they were in only 400 malls. Five years ago they were in 4 countries and now they are in 8 countries. The retailer's growth prospects could be different.

Just to say it will go back to its historical P/E, you can see the flaw in that logic. Don't fall into that trap.

## Another Example of Conventional Thinking: DELL

From: The Detective and The Investor: Uncovering Investment Techniques from the Legendary Sleuths by Robert G. Hagstrom

In those critical early years of 1992 through 1994, most investors and analysts who followed computer companies were still operating on old assumptions. Conventional wisdom at that time held that the time to buy stocks of PC manufacturers was when the price was six times earnings, and the time to sell was when it hit twelve times earnings. That was the historical trading pattern, and few people saw any reason to question it. The simplistic view of most on Wall Street was, This rule of thumb has worked reasonable well in the past, so why change it?

The concept of economic value added hit the mainstream financial press in 1993, with a cover story in Fortune. Anyone reading the article carefully would come away with an important message: If a company's cash earnings represent a high return on capital that should bode well for its future stock price.

At that point, thoughtful investors could have reasoned their way to a profitable conclusion: I should be looking for companies with strong earnings and low cost of capital. And if they were looking at computer companies, they would have hit on Dell.

The lesson: Why would you, as an investor, sell Dell when it reached twelve (12) times earnings if its ROIC was high and going higher. Dell's economic model is built on maintaining low capital costs.

What is excess cash?

Understand the business before deducting cash from Enterprise Value. Some businesses run with just a little cash. Some business use negative working capital. I assume the acquirer doesn't need the cash, so you would get it back then. A retailer has a lot of cash to weather a bad season or two. There are times that when you deduct the cash from Enterprise value, it is the wrong thing to do. Some retailers need to keep a certain percentage of cash in the til to accommodate customers. In summary, before deducting cash from Enterprise Value, determine the cash needed to annually run the business, for example: $1 \%$ to $2 \%$ of sales.

Cheap on EV analysis. The stock is at $\$ 6$ with $\$ 5$ in cash and the stock is going to $\$ 7$ in two years. But you are laying out $\$ 6$ and it is only going to $\$ 7$. The EV doubles ( $100 \%$ ) but your return is $8 \%$ annually compounded over two years. Also, think about how management will spend the excess cash.

## Marvel Entertainment

There was a great report on Marvel, but I struggled with that one. It is on the Magic Formula Investing Site as one of the recent picks. The approach taken was reasonable. You have a big movie, then they make money over the rights to the characters. They do have a stable of characters, so there is some recurring nature to the business with their characters, but the question is: what are normalized earnings? In a couple of years there will be two movies out and it will do this, but last year they had one movie out. Should you normalize at 2 movies or 1 movie a year. How long will it last? The person picked 1.5 movies per year. Unless it is super cheap, I might pass on something like that. It is a particularly good business-licensing brand nameshowever, I struggle in figuring out normalized earnings. .

## An Option Question: Weighting your position in Stocks vs. Options

Let us say you find something interesting, how much do you weight your position in options vs. a stock position?

JG: That is a great question. This is how I would view it. If I had a $30 \%$ position in a stock, I don't think I am at risk for that $30 \%$ of the portfolio because the investment is in an unleveraged company. I view a disaster as being down $33 \%$ (or $10 \%$ of the portfolio- $33 \% \times 30 \%$ ) because if I am going to be buying a $30 \%$ position I am buying it at $1 / 2$ of intrinsic value. So I am buying at $\$ 5$, and I think it is at worth $\$ 10$. So I assume it goes down to $\$ 3.50$ or $\$ 3$. That is how much I have at risk. But with a leap...

What is great about investing in stocks-one way to look at them--is that they are like perpetual options. They never expire unless the company goes bankrupt. So...the comfort you have being a value investor is it may take an extra year but I think it will get to fair value so I may have to hang out for two or three years.

Then you go buy an option that expires in two years you are taking that off the table. We have a few bets like that. We have some combination of stocks and some options that expire in two years and some in 2.5 years. You are adding another risk because stuff happens. The market could crash; the housing market could crash; the consumer drops dead; another 9/11. I know that if I draw a line from now until the next five years I know where the business will be-sort of a Warren Buffett thing; I feel very confident from here to there the business will grow and go up. The business will grow $7 \%$ to $15 \%$. I feel very confident that the business will grow $15 \%$ during that time. If things stink and there is a big drop in the middle, it will still grow $7 \%$ from today until five years from now.

With an option, it may get very lumpy, so I take that into account. The way I compare a $20 \%$ position to risk $40 \%$ of my money so right away I risk $8 \%$ in that position. Then I take the time element (of a wasting asset), because I could get it right but have the timing wrong. So I take the position down to $5 \%$ from $8 \%$. I assume I could lose all my money in my option. So an option position might not exceed $5 \%$ of my portfolio not $15 \%$ to $30 \%$ of a stock position.

What I mean by not leveraging, is that they can't carry me away with my entire portfolio. When I make money I look at it pre-tax and when I lose money I look at it post-tax. Oh, I lost $50 \%$ on that but after-tax it was only $10 \%$. There are little mind tricks you can play.

Student: Do you buy in the money or out of the money options? How do you choose what strike price of an option?

JG: Generally I buy a little bit in the money. A Call option or a Call/Leap is the same as buying a put and buying a stock; they are identical to each other. Generally, I don't want to pay a lot of money for the put so usually I would rather take a lower strike price where the Call strike price is struck at a lower price so the put option aspect of the Call is not worth as much. I am not investing as much money in my put the lower the price I go.

So bottom line-another way to look at it is your risk \& reward. There are two ways to look at that in answer to your question. One is the risk/reward. Let us say I own IBM and it is $\$ 60$ and I think my valuation thesis is that in two and a half years I think it has a good shot it can be worth $\$ 90$. Ok? I can buy these $\$ 75$ calls for a $\$ 1$ for a 15 to 1 payoff. Or alternatively I could say, "Look, right now I could buy the $\$ 55$ calls at \$9-they are $\$ 5$ in the money-the stock is at $\$ 60$ and it is costing me $\$ 9$ or $\$ 10$ to buy that but that $\$ 10$ can go to $\$ 30$ so I triple my money and even if I am wrong I will get back all my money back if the stock is at $\$ 65$." So I will factor that in. It would be unlikely to lose all my money if I am close to right, because I am thinking \$90. To lose all my money it would have to go to $\$ 55$. I factor that in, but it is not a science.

The thing that I showed you was-how do I know to buy the $\$ 55$ calls at $\$ 10$ instead of the $\mathbf{\$ 6 0}$ calls at $\$ 7.50$ when the stock is at $\$ \mathbf{6 0}$ ? Which is better of the two Call strike prices? What I say is, "I always I look at the call spread—a bull spread." What that involves is buying the $\$ 55$ call and selling the $\$ 60$ call. If I bought the $\$ 55$ call for $\$ 10$ and sold the $\$ 60$ call for $\$ 7.50$ for a net cost of $\$ 2.50$ ( $\$ 10-\$ 7.50$, not including commissions). The most I can make if the stock is above $\$ 60$ is $\$ 5.00$ or a $100 \%$ return. If the stock is at $\$ 55$ then I lose $100 \%$. The spread is worth $\$ 5$. If the stock is at $\$ 57.5$, I am at break even ( $\$ 55$ Call Strike Price plus $\$ 2.50$ paid for the call spread $=\$ 57.5$ ).

If the stock is above $\$ 60$ it will be a double in 2.5 years because I believe the stock will be at $\$ 90$. Does that sound like a good bet based on my thesis? I think the stock will be at $\$ 90$. So I will buy the 55 call because I am effectively buying the spread of $\$ 55$ call/ $\$ 60$ call.

It is an exercise that I do in my head when I want to own an option outright.. I don't really buy the spread. Do I want to own the 55 call or the 60 call? So I compare the two by doing the bull spread in my head. By laying out an extra $\$ 2.5$ to buy the $\$ 55$ call at $\$ 10$ vs. the $\$ 60$ call at $\$ 7.50$, I am effectively choosing a bull spread.

The most I can make is $\$ 5$ but the spread will never close until the end. I would never pay $\$ 4.5$ for example. The $\$ 55$ calls are plus $\$ 10$ or lay out $\$ 7.50$ for the $\$ 60$ call? Buying the $\$ 55$ vs. the $\$ 60$ is effectively like owning the spread. If I buy the $\$ 55$ call I am effectively paying for the $\$ 60$ call and the $\$ 55 / \$ 60$ call spread. Laying out the $\$ 2.50$ brings me $\$ 5.00$ if I am right for a $100 \%$ return. Just go home and think about it in your head.

Student: Why would you ever buy a stock when you can get a higher return with an option?
JG: If the stock goes down $8 \%$ over the next two years because the world is a crazy place, I lose $8 \%$ in owning the stock, but $100 \%$ of my money owning the option spread.
The problem is that I am wrong a lot despite what I tell you in here so that is risky. If it is a good bet--and I would call any option or spread position a bet--I will win over time but not necessary on any one bet. I want to be the betting house where I will win a series of bets over time if my valuations of the companies in the group of bets are correct.

Anyone read Fortune’s Formula-it is a new book out (See shaded box below). It talks about the optimal way to structure a portfolio. It is about horse racing and odds. What is the optimal way to structure a portfolio if you have good odds? If I could flip a coin and I could get $\$ 1$ if it is heads and lose $\$ 0.50$ if it is tails. You want to do that a lot but if you have a pile of money you wouldn't put $100 \%$ of your money on that particular bet. Even though it is a great bet, you wouldn't put all your money into it because you could hit a bad run and lose all your money.

From www.bankstocks.com Solve the following problem. You're at the track with $\$ 1,000$ in your pocket, and see that the posted odds on a certain horse winning an upcoming race are 5 to 1 . You (and only you) have a secret line of communication to the horse's trainer, and learn that the horse's chances of winning are meaningfully higher than the posted odds-say, 1 in 3 . Which is to say, you have a material information advantage over other bettors. How much of your $\$ 1,000$ do you bet?

That, in a nutshell, is one of the most crucial and least discussed dilemmas in the capital allocation process. While CAPM types preach about the virtues of diversification, the Warren Buffets of the world know better. Diversification only assures mediocre returns, they point out; the real money is made when you put a lot of capital to work in those rare opportunities when you have a true edge. Like, say the 1-in-3 shot above that's going off at 5-to-1.

William Poundstone gets at this issue in Fortune's Formula: The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street. The book is a history of a formula called the "Kelly Criterion" that allows gamblers (and other capital allocators) to maximize their profits on a series of bets where they have an information edge, but without betting so much that they risk going broke. Take the horse-racing example, above. Yes, you'll want to bet more than you normally would, to make the most of your insider knowledge. But you don't want to bet everything: even by your own reckoning, the horse has just a $33 \%$ chance of winning. Once you're bankrupt, you can't get back in the game. The optimal bet size is somewhere in between.

The namesake and inventor of the Kelly formula is a man named John Kelly, a mathematician at Bell Labs in the 1950s and 1960s. Kelly developed his formula by building on the work of another Bell Labs mathematician, Claude Shannon. Poundstone says Shannon is considered by many to be the second-mostbrilliant individual of the twentieth century, after Einstein. In particular, Shannon is the father of "information theory," which serves as the broad mathematical foundation for essentially the entire electronics and digital revolutions. Everything from integrated circuits to fiber-optic cable to DNA sequencers rely at rockbottom on Shannon's work. His models apply to any kind information conduit, electronic or otherwise. They allow communications engineers to minimize the amount of noise-static, gossip, whatever--in a given conduit, and maximize the amount of information the conduit can carry. Which is to say, Shannon essentially developed a mathematical way to convert uncertainty into certainty.

Communications engineers aren't the only ones with an interest in separating information from noise, of course. Bettors and investors could use some help there, too. So it's perhaps not coincidental that some of Shannon's math can be put to use at the race track, the blackjack table, and on Wall Street. One of the first to apply Kelly's formula was a young physics grad student, Edward Thorp, who used it in conjunction with a card counting system he developed for blackjack. (Thorp later wrote a book on card counting called Beat the Dealer that's now considered a classic among blackjack aficionados. Later on he ran a hugely successful quant fund, Princeton-Newport Partners that eventually got tangled up in Rudolph Giuliani’s pursuit of Michael Milken in the 1980s. But that's another story.)

How does the Kelly formula work, you ask? It's pretty simple. The formula says that the optimal wager size is determined according to the following fraction:

## Edge/Odds

The denominator, odds, is the public odds posted on the track's tote board. The numerator, edge, is the amount you stand to profit, on average, if you could make this same bet over and over and over. Let's go back to the horse racing hypothetical in the first paragraph, and see how it works. The posted odds are 5 to 1 . So we'll put a 5 in the denominator. But recall that you believe the true odds are 1 in 3 , not 5 to 1 . If you bet $\$ 1,000$, then, you'll have a $33 \%$ chance of winning $\$ 6,000$ ( $\$ 5,000$ plus your original $\$ 1,000$ wager), or $\$ 2,000$, on average. On a $\$ 1,000$ bet, your profit is thus $\$ 1,000$. That's your edge. For the formula's purposes, the $\$ 1,000$ becomes a 1 .

So according to Kelly, the edge is 1 and the odds are 5 . Plug in the numbers and you get $1 / 5$. You should bet 20\% of your bankroll.

A few comments are in order. First off, this only works in instances when you have a true, material information advantage. If you don't, your edge is zero, so you shouldn't bet. Second, the only time the formula will tell you to bet all you've got is when you're absolutely, positively sure you'll win. In the real world, that hardly ever happens. Thus Kelly prevents bettors avoid being wiped out completely, so that they'll have capital to put to work when the next opportunity rolls around. This is no small advantage. Other capital allocation strategies gamblers use, most notably "martingale," in which the player doubles down after a losing bet in order to quickly recoup losses, a can be quick trips to bankruptcy. Finally, using Kelly on a series of bets is the most efficient way to compound your winnings. Models show that, say, a more aggressive "Kelly times 2 " strategy actually leads to lower long-term returns.

Kelly's advantages shows the results of various strategies for betting on a series of hypothetical coin flips where the bettor has a $55 \%$ chance of winning.

It scarcely needs to be added, of course, that the economics profession has roughly zero use for all this. First off, the formula was developed by a mathematician, not an economist, which naturally makes economists skeptical. Second, the notion that an investor can have a true edge is anathema to the efficient-market dogma that still dominates most economics departments. Paul Samuelson is particularly scornful of Kelly (or "g," as it's referred to in economics circles), calling it a "fallacy."

The Kelly criterion's virtual absence in economics and M.B.A. curricula explains why the formula is not well known on Wall Street. It shouldn't be. It is hard enough to find ideas where an information advantage is even possible. When those do occur, investors can use all the help they can get in figuring out how much capital to apply. Kelly may not be as ideally suited to Wall Street as it is to blackjack, but it sure seems like a good place to start.

## Student: Do you use the Kelly Formula?

JG: It (investing in stocks \& options) is not as clear as the Kelly Formula. What are the odds of doing that. You are not taking bets where you lose it all; it is not as clear as the Kelly Formula. There is not an optimum way to bet on stocks.
A. It is uncertain and
B. You don't lose all the money you put up.

Student: What if you have an inkling of IBM moving quickly to $\$ 90$.
JG: If I put on a bull spread.... The opposite of a bull spread is a put spread. The puts at $\$ 60 / \$ 55$ by definition has to be at $\$ 2.50$ because they (call and put prices) have to add up. There is still a chance that within a year the spread will still be worth something. Sometimes in the spreads, a shorter expiration is better than a longer expiration. If it is expiring. You have a whole year for the stock to fall. There is an interesting dynamic in spread. A lot of this stuff has been learned the hard way. (Study the time decay of options).

## Moody Corporation Example

## Student: Could you go over Moody's Example?

JG: This took a long time to learn but hopefully it won't take a long time to teach. Let us say, that when Buffett bought Coke it was growing at $12 \%$ per year and Moody's was growing at $12 \%$ and they both are earning $\$ 1$ per share. For Coke to continue to grow at $12 \%$ it has to take 20 cents for every dollar and plow it back into its business for working capital, etc. Coke uses the 20 cents of the dollar they earn to continue to
grow at $12 \%$ so the remainder is 80 cents for other uses. Moody's meanwhile needs $\$ 0$ to grow $12 \%$. So what we said was that a $\$ 1$ from Coke is worth 80 cents compared to $\$ 1$ for Moody's. Moody's earnings are worth $25 \%$ more ( 80 cents to 100 cents or 20 cents/80 cents for $25 \%$ ).

The dollar of Moody's earnings was worth 20 cents more (20/80 cents $=25 \%$ ) $\$ 1$ vs. $\$ 0.80$ for Coke. Or 20 cents/80 cents, so Moody's earnings is worth $25 \%$ more. Coke will eventually grow 5\% a year, so they don't need to invest as much to grow at 5\%. So 8 years from now they only have to invest 10 cents per year to grow at $5 \%$. So Moody's won't be worth $25 \%$ more forever, it might be worth $10 \%$ more. So on average a dollar of Moody's earnings is worth $15 \%$ more than Coke's earnings of $\$ 1$. Moody's earnings would be worth $10 \%$ more not $25 \%$ over time. I assume both grow at $5 \%$ forever but Coke puts in 10 cents per dollar while Moody's puts in $\$ 0$.

Student: What about the reinvestment rate? The payout rate?
JG: I would say these 80 cents will be growing at a certain rate. Yes, to grow you need more working capital. In that particular business (MCO) you don't need more working capital, but with Coke I assumed that you need more working capital to grow. Now you are talking about returns on working capital of over $100 \%$ for Moody's. Yes, you have to lay out for working capital. We looked at history to determine reinvestment rates for Coke and Moody's.

Look let us say interest rates were the same so apples to apples we can pay $15 \%$ more for that. Coke moved to some price and now it has come down, but let's ignore the crazy prices that it traded at in the late 1990's. But the next two or three years, the stock (Moody's) tripled. We are comparing the two because we thought we could get a triple in two or three years. But don't forget, remember the truck driving thought the huge gap. Don't try to fine tune it. If you have to fine tune it, then the investment thesis is a little too close.

Forget about the crazy price Coke traded at—65 times earnings in 1998.
Go look at Duff \& Phelps’ change in tangible assets as they grew. There was no change, they spent every nickel on stock buy backs. They didn't need any capital to grow. They were very similar to Moody's. This is the best business you will ever going to see.

I gave out that one first (the Moody's Example) so you have something to compare it to. Almost all other businesses will be inferior. How good a business is it relative to Moody's?

We were looking at American Express recently and so we were comparing it to Coke. It is a lot closer to Coke than Moody's. It is a nice way to compare. It is nice to have that type of metric.

## Buffett's Advice to Students

JG: I just want to play one thing. $\qquad$ A video of Warren Buffett speaking to business students. $\qquad$
Buffett Lecture: Maugham at Salomon Brothers never once spoke about salary. He worked 18 hours days for months and months. He showed uncanny judgment on what to bring up to me. I often use this illustration in my talks to classes. If one of you could pick one of your classmates in order to share in their earnings for the rest of their life. And you could pick anyone you wanted and you would get $10 \%$ of their earnings of that individual for the rest of their life, what would you think about in terms of whom you picked? Would you think about the person with the highest IQ? The highest grades? Probably not. You are thinking about a whole bunch of qualities of character.

Every one of those qualities is attainable. You are not thinking about who can throw a football 65 yards. Ben Graham wrote down all the qualities that he admired in other people and the qualities that he found objectionable. Those qualities are ones that you can chose. The chains of habit are too light to be felt until they are too heavy to be broken. The right habits that you would want to obtain of someone you would want to own $10 \%$ of their earnings. The people I see who function well are the ones who don't have the biggest motors but the most efficient motors. It is those qualities of character that are most important. What on the left
hand side of this list (good qualities) I can't achieve myself and what on the right hand side of the list I can't get rid of myself (bad qualities). In the end decide that you will be the one you would buy $10 \%$ of.

Think how few people actually keep that in mind—think of those in the business world. I think you can all be very special. You all have the ability and the intelligence. You can decide to be very successful in very many ways by trying always to do the right thing. I enjoyed teaching you.

APPLAUSE.

## END

## Appendix

Books by Robert Haugen:
The three books about the behavior of the stock market that he wrote were:

The Inefficient Stock Market. What Pays Off and Why. This focused on expected-return factor models, which, in part, attempt to exploit error-driven volatility. The positive payoff to cheapness results from the market's overreaction to success and failure. The positive payoff to intermediate-term momentum results from the market's under reaction to positive and negative surprises in individual earnings reports.

The New Finance focused on the market's major systemic mistake. In failing to appreciate the strength of competitive forces in a market economy, it over-estimates the length of competitive forces in a market economy, it over-estimates the length of the short run. In doing so, it overreacts to records of success and failure for individual companies, driving the prices of successful firms too high and their unsuccessful counterparts too low.

The market doesn't under react to a unique event.
Beast on Wall Street focuses on stock volatility. It contends that stock volatility has three comp0onents.
Rational and unbiased responses of stock market prices to real, economic events are the source of event-driven volatility.

## End

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## Magic Formula of Little Book Just May Work

## November 9, 2005; Page C1

As hard as it is to envision, hedge-fund titans and other masters of the universe soon will be tucking themselves into bed with a thin tome bearing a cutesy title: "The Little Book That Beats the Market."

Here's why: The author is Joel Greenblatt, a former hedge-fund manager. His first investment guide, published in 1997, also sported a hokey title, "You Can Be a Stock Market Genius (Even If You're Not Too Smart)," and sold about 38,000 hardcover and soft cover copies.

Not bad as first books go, but it also became a cult hit in the insular world of hedge funds, passed like samizdat from manager to manager. A book of war stories and case studies written clearly and laced with jokes, it had two profound insights, say hedge-fund managers who have pressed the book on me.

One was that there are secret hiding places in the stock market, like spin-offs and restructurings, where bargains tend to lurk. The other was there wasn't any compelling reason to have a giant portfolio of dozens of stocks when a well-designed, concentrated portfolio could accomplish the same goal of achieving high returns without adding risk.
"His book on investing is by far the most valuable thing I have read," says David Einhorn, who manages a large, successful hedge fund, Greenlight Capital.

But hedge-fund managers "were not quite the underprivileged group I was shooting for when I wrote it," he says. So for his second book, Mr. Greenblatt says he wanted to write an even more basic and fundamental book on investing that would appeal beyond Wall Street. Think Benjamin Graham does Borscht Belt.

Mr. Greenblatt, 47 years old, says his goal was to provide advice that, while sophisticated, could be understood and followed by his five children, ages 6 to 15. They are in luck. His soon-to-be-released "Little Book" is one of the best, clearest guides to value investing out there. I have some minor quibbles, but in a world where individual-investor advice is dominated by jargon-filled short-termism on the one hand and oversimplified throw-up-your-hands indexing on the other, Mr. Greenblatt's approach is valuable.

It is so simple and cute that an investor with a little bit of knowledge might mistakenly dismiss it. Mr. Greenblatt titles his investment approach a "magic formula." His tongue is in his cheek, but not entirely. He writes as if he were J.M. Barrie spinning a Peter Pan-esque fairy tale, but with the fervor of a true believer:
"You have to take the time to understand the story, and most important, you have to actually believe that the story is true. In fact, the story concludes with a magic formula that can make you rich over time. I kid you not."

What is the magic formula? Invest in good companies when they are cheap. As Mr. Greenblatt might say: See? We told you it sounded obvious. Yeah, so what's "good"? And what's "cheap"?

Good companies earn high returns on their investments, he explains, while cheap companies sport share prices that are low (based on past earnings). His proxies for these criteria are return on capital (operating profit as a percentage of net working capital and net fixed assets) and earnings yield (pretax operating earnings compared with enterprise value, which is the market value plus the net debt). To his credit, however, Mr. Greenblatt explains all that parenthetical jargon in terms that shouldn't insult his peers but that will ring a bell for the unschooled masses.

To make things simpler still, his free Web site, www.magicformulainvesting.com, screens companies using his criteria. He advises individual investors to buy a basket of top stocks and turn them over on a strict schedule, depending on how they perform. (For maximum tax advantage, sell losers just before a year's up and winners just after a year.)

It sounds too easy. But in fact, his approach is difficult not because it is hard to understand, but because it requires patience and faith that you are right when the market is saying you're wrong.

This is based on Warren Buffett's investment principles. But they bear repeating. Even a die-hard value investor like Mr. Greenblatt says he didn't realize that trying to find cheap, good companies, rather than just cheap ones, was so important until the 1990s. While Mr. Graham, Mr. Buffett's mentor, was looking for starkly cheap companies, Mr. Buffett wants only the great ones.
"I didn't get Buffettized until the early 1990s," says Mr. Greenblatt. "I wish it happened earlier."

Looked at retroactively, the returns of the "magic formula" beat the market handily. From 1988 through 2004, according to Mr. Greenblatt's book, the high-return/low-price stocks of the largest 1,000 companies had returns of $22.9 \%$ annually, compared with $12.4 \%$ for the S\&P 500.

The most convincing part of Mr. Greenblatt's argument is that when 2,500 companies are ranked for price and returns (based on the formula), the top 10\% outperformed the second $10 \%$, which outperformed the third $10 \%$ and so on. "The darn thing works in order," he says.

There are some limitations to the approach. It seems prone to tossing up stocks whose high returns and growth may be in the past. Magic-formula stocks with more than $\$ 1$ billion in stock-market value include lots of fastgrowing specialty retailers and niche pharmaceutical companies. Some of these will flame out.

That's why Mr. Greenblatt argues that novice investors buy at least 20 or 30 of them. For himself, he buys a smaller number that he can know deeply. But that requires something not easily taught in a book: good instincts and judgment to distinguish true cheap gems from one-hit wonders.

Though he always was a value investor, his hedge-fund firm, Gotham Capital, wasn't always run on his magic formula, especially in the early years, when he tended toward complex arbitrage. He started Gotham in 1985 and ran it for outside investors for 10 years, achieving compounded annual returns, before fees but after expenses, of $50 \%$. He started with $\$ 7$ million, mostly raised through junk-bond king Michael Milken. After five years, he returned half the outside capital. He finished with more than $\$ 350$ million and returned all the remaining outside capital.

These days, he spends his time teaching at Columbia Business School and helping run a Web site for pros, the Value Investors Club. His wealth is mostly tied up in Gotham Capital, which manages $\$ 1.6$ billion, including some outside money in a fund of hedge funds he started a few years back.

His home cooking isn't just good enough for Mr. Greenblatt. He's got his kids eating it, too. His eldest son is doing well following the book's advice. A daughter, at it for two months, is having a rougher time. "I'm not sure if she didn't have me as her daddy she'd be hanging in there," he says.

Joel Greenblatt Class for Special Situations Investing
Wednesday, March 23, 2005

## Brian Gains of Springhouse Capital

## Case Study of Investing in a "Dying" Industry

Italics: Transcript by John Chew
Joel Greenblatt Introduction:
Our guest will not sing, but he is really smart and he runs a fund called Springhouse Capital. He started in 2002.

I hope you took a look at BBI, MOVI and Hollywood.
Brian Gains, Founder of Springhouse Capital

## My title is: Making money in a "dying" industry

I will take you through how I came up with the idea, the work I did and then a couple of different case studies, which I think will be pretty interesting along the way--the facts or the things that were going on--so you can experience what I was thinking or the thought process I was trying to go through.

As you know from your studies of the stock market, there are often hated industries where you want to go if you have more of a value bent. Some of the places I go to find investment ideas.

Idea Generation

- 52 week low lists
- High short interest
- Investors' Business Daily negative momentum
- Spin-offs
- Distressed Debt: Highest yielding areas

Everyone makes fun of Investors' Business Daily but you can go in there and find negative momentum industries where everyone hates the industry(s). You can see what people hate. Start with some industries that may give you some ideas. I am sure Joel has spoken about spin-offs. You can see what is in the distressed area. Obviously, if debt is trading at 50 to 60 cents on the dollar, people don't like it--that would be a good place to start. This leads you to a place to look for ideas.

- Challenge is figuring out if the hate is logical (there are reasons why businesses are hated.)
- Companies fall in one of four categories:
-- Unsustainable business
- Avoid
--Bad balance sheet (Cellular in 2002)
--Cyclical (Commodities in down cycle)
- Normalized earnings
--Dying businesses (Photography, Photocopying, etc.)
- How long will it last?
- Is it really dead?
- What are the people on the inside doing?
- Where is the cash going?

The challenge is figuring out if there is a logical reason(s) a business is hated. I like to think that things fall into four different categories:

1. Unsustainable Business:

- AVOID

An unsustainable business is like an eToys.com, Pets.com. Something that collapses in 2001-2002 and you are looking at it. You can say it is really cheap; the stock used to be at $\$ 50$ and it is at $\$ 2$ now. In reality, it is not a business--no matter how much cash it has or the capital structure, eventually it wasn't going to work. So that is one example.

## Student: General Motors (GM)?

BRIAN GAINS: GM's business is probably sustainable. Sure it has problems with its debt structure, but it makes cars that people need.
2. Bad Balance Sheet: (Cellular in 2002)

- Analyze the capital structure
- Often times akin to an option bet and understanding cap structure determines the maturity of the option

Then I put Bad Balance Sheet, which I think Cellular companies in 2002 are a prime example. The important thing there is analyzing the capital structure. Everyone knew that cellular phones would be around, but it is a question of they had too much debt on the balance sheet. Sprint and all these different companies, if they could pay the debt, they clearly could make money. They way to look at it is to analyze the capital structure. You literally have an option bet. And you have to figure out, "Are the banks going to take this under?" And if you can survive past that point--if the debt is due in five years, which is long enough for the company to survive-you probably have a great option bet.
3. Cyclical Business (Commodities in a down cycle)

- Normalized Earnings

Richard Pzena is the king of normalizing earnings for cyclical businesses. These businesses have a reason to exist, but you have to look for the middle point. You have all been through that.
4. Dying businesses (Photography, Photocopying, etc.)

- How long will it last?
- Is it really dead?
- What are the people on the inside doing?
- Where is the cash going?

I will talk about the last category, the allegedly dying business. Maybe it is dying; maybe it is not. And some people would say non-digital photography, photocopying, fax machines. I will talk about video rental. And the key questions are: "Is it really dead?" How long it is going to last? Number three is key: follow the insiders to see if they have confidence in their business. That is a great key to see if this thing has some legs left in it. Also key is where is the cash going? Because when you are dealing with these stocks, it is less about a multiple and more about how much cash they are going to generate and what are they doing with the cash. It is really important when you are looking at the return to think about the next two years, they are going to generate $\$ 2$ dollars a share in cash and if you are buying the stock at $\$ 8$, well that is pretty good. You still have to figure out how long that will last. But following the cash is key.

## Analyzing the "dying" business

- Process involves going through all the negative arguments and constructing a thesis as to the merit of each. (Thesis vs. Antithesis)
--Most time intensive activity
- Some things to accept before attempting this at home:
--Your behavior and gut instinct probably won't support your thesis
--People will say you are nuts
--Your friends at other funds will tell you they are short the stock and you are nuts.
--At times you will come to believe they are right and you are nuts.
The way I tend to look at things is that I pick up an industry and I go through all the reasons why people hate it. List all of the things that are really, really bad about it. Then try to find a reason. OK, is it as bad as they think? Is there a reason why it is not as bad as they think?

So right now someone pointed out General Motors (GM). You can see GM down and then you look at all the auto parts guys and list all the negative thoughts on the industry. Then construct a thesis as to why the business is not as bad as people think because of $A B C$.

Your behavior and gut instinct are probably not going to support what you are doing. If you are looking at video rentals, you are probably saying, "I don't rent videos anymore." The one key to remember is that you are not the target audience. You are not like most of America. For one thing, you are younger and more
urban. A lot of things you do will be more technologically advanced. So if it is faxing or renting videos you will say, I don't do that anymore so forget that industry. Your friends will say you are crazy.

## What's Bad about Video Rental?

- Sell-Through
--Long-term trend?
--Pricing continuing downward?
- VOD
--45 day window
--Additional features/24 hour limit/HD and selection constrained
- Netflix/Home delivery
--Niche product
--Instant Gratification
- Digital Distribution
--Computer watching
--Time to download relative to length of movie
--Quality/HD
- Piracy
- TIVO
- Ever expanding entertainment options.

Brian Gains: So what is bad about the rental business? Why wouldn't you like the Video Rental Business?
Students: Netflix, Wal-Mart selling DVDs. VOD.
Brian Gains: Wal-Mart sells cheap DVDs, so people don't need to rent.
One of the things I would add is file sharing, piracy and digital distribution. I would talk to different people and ask what is not good about the business. And then sell through. Is the selling of cheap DVDs--\$6 for two DVDs-going to continue. Is this a long- term trend? Can the price continue downward? Wal-Mart is selling DVD's at a loss to drive traffic. The studios love this. What other business has the distributors of their product intentionally selling the product at a loss?

Anyone have any thoughts?
So, I guess the way to look at this is that this is a risk. So we can accept that we don't know what is going to happen in pricing. We know that the studios currently make a lot of money off of DVDs and you can establish that. As to pricing it is very hard to predict. That is going to be one of those variables where you just don't know--is pricing going to steadily creep down? You know these guys (studios) don't want to cut the prices. If the DVD are growing every year, they have no incentive to cut the prices. It costs about $\$ 2$ to make a DVD and they are selling new releases for $\$ 17$ to $\$ 18$. They (the studios) have no incentive to cut prices. Research will show you that Wal-Mart is selling new DVDs at a loss. So Wal-Mart is doing the studios a favor. How often do you see a distributor of your product sell at a loss? It is infrequent. We know the studios are pretty happy. They have no desire at this point to cut prices. So logically, the studios don't have an incentive to lower prices.

VOD: It is important to understand how new releases enter the theatres and they are there for two or three months, then they sit on the sidelines. Then they go to DVD. 45 days. New releases are important for video stores. $80 \%$ of their rentals are new releases. The studios don't want it to go to VOD. They make $\$ 15$ every time they sell a DVD. THIS IS CRITICAL because someone can say VOD will destroy the video rental stores. You can make a case that the studios make so much money off of selling(DVDs) that they will not collapse the window of time for the video stores to sell the DVDs before the releases go to VOD.

You can't say that it (VOD eliminating DVDs and videos) isn't going to happen. It is a question of how quickly people change their habits. $2 \%$ of all music sold is digitally distributed. So $98 \%$ of all music sold is through CDs.
I would say eventually it is going to happen, it is just how long will it take.
The other thing about VOD, you need to have digital cable so you are talking about a smaller portion of the country. You need to not have (or not care about) additional features like extra scenes. Studios are moving toward high definition DVD, so you have another reason not to buy VOD.

Netflix home delivery. Netflix has about 2.6 million customers. Blockbuster has 750,000 customers. It is a different business. It has Premier customers--people who want more category depth. A lot of niche films.
These aren't the same customers.
Digital distribution takes too long to download. In reality it takes time too much time for the average consumer.

TIVO came out, but people still want to watch movies. People want to watch new movies. A truism no matter how distributed. People go to movies because of the experience.
Ever expanding entertainment options.

## What's Good about Video Rental?

- Good cash flows
- Good returns on new investments
- 45 day window
--Economics of DVD
- More stable than people think
--Note that most businesses will last longer than people think
- Mom and Pop's still hold $40 \%$ share
- What else can they do with their infrastructure?
--Retail/Video Games/Used
Brian Gains: What is good about the video rental business?
Student: The cash flows are good.
Brian Gains: The cash flows are great. They have a great retail box. Video stores can sell other stuff. The returns on new video stores are absolutely amazing. Because it doesn't cost much (to set up a store with inventory). It is $\$ 150,000$ to open a Blockbuster. The beauty of it, is that if it doesn't work, then you can move it eight miles down the road and try again. You can move the business easily. The returns are high and you can afford to screw up a little bit. The 45-day window is critical for video stores (allowing Video Stores to sell $D V D s)$. This is more stable than people think. A lot of businesses last a lot longer than people think. For another 20 or 30 years people will still be buying videos. People are still buying phonographic records and there is a replacement for records.

There still is a $30 \%$ to $40 \%$ share of the market in mom \& pop stores. It is kind of evil sounding but it is capitalism. If the small business owners still have share, as a chain like Blockbuster, you can go in and you can take them out. So Blockbuster can still gain share.

What else can they do with the infrastructure?

So that is where a lot of the research is done. A lot of time talking to people to figure out how much of this is real.

## Macro to micro

Simplest place to look to find all these factors rolled up into one easy measure of video rental performance is the same store sales of the respective stores.
--Mitigating factors that will disrupt this analysis
OK, so how do I make money off of this? Before it was all-theoretical; before you were kind of thinking about the industry.

For Video rental performance, the same store sales (SSS) statistic is key for forming how much of this is coming to life. You form all these theses. And then try to find out where it will show itself-in the video guise of same-store-sales. But the one thing to remember in the video business there are many mitigating factors that will affect SSS as any business (weather, feature presentation schedules, political events, days in the quarter). In this case why SSS may not be indicative of the business. Ans: Blockbuster releases drive customers to stores--hit driven product/sales causes lumpy sales. People look at comps and say that comps are down 3\% without adjusting for what effects the change. Weather can affect sales. 12 weekends in a quarter--one bad weekend can have an affect.

I would also say, children's movies--they sell they don't rent. Kids have a propensity to watch the same movies over and over again. It would not be normal behavior for adults.

It is the type of movie that the store rents. Sometimes political events may cause people to watch more TV then rent movies.

The Blockbuster (BBI), Hollywood (HLYW), MOVI are all taking share from the mom \& pop (stores), then it will make it look like the business is worse, but they are taking more share. Their business is surviving, because they opened a Blockbuster (store) but the local video store shut down. So everyone who went to that local store will go to the Blockbuster.


Now we will go through what I went through with Hollywood Video (HLYW). Blockbuster has 6,000 stores while Hollywood has 2,000 stores but in the same kind of areas though more West coast oriented. Consider it identical.

The (stock) market had a great 2003 and I am sitting around in Dec 2003 and there is nothing too interesting going on. So I am screening different stuff. So I say OK, everyone hates the video rental guys. So I do all that first stuff we talked about. Then I go to an investor presentation. I go to see Hollywood Video. At that point I knew nothing other than I had some arguments as to why this industry could exist. Let's look specifically at Hollywood Video.

What you will see in the Hollywood story is that they are opening up Game Crazies, which are like a game store boutique. They are getting great returns. The CEO is also saying he is going to open 150 new stores a year and getting great returns. So you say, "Hey, maybe the business doesn't last so long, but he (CEO of HLWD) seems to think so. He is still opening stores. He is mildly positive.

The CEO owns $10 \%$ of the stock and this will come into play a lot in this case. Because we went through all the arguments and we can say, I believe him and I can get pretty comfortable, but what is someone on the inside saying? In this case, he (CEO) owns $10 \%$ of the stock and he is the one making the decisions to build the new video stores. That is important to remember, because the guy who owns $10 \%$ is saying he still wants to build these things. Maybe he is dumb, maybe he is not, but you have to give him more credit for knowing more about the business than you do because he is living it (the business) day to day; he is seeing the numbers; he is running all the different tests that say to him--this is still kind of working. And it is his money and he will probably have more money at stake than you probably will.

So really, really important in this case and in a lot of businesses that are dying to see what insiders are doing. If the insiders are bailing out and you think the business is dying--it probably is.

## Hollywood Video

Began looking at it late 2003 after attending an investor presentation
--High returns on Game Crazy (HLYW's version of Gamestop or Electronics Boutique) and new Video Stores.
--Mom/Pop still represents $40 \%$ of industry
--CEO owns 10\% of the stock
HLYW is at $\$ 13$ to $\$ 14$ bucks. So this is the news release on Jan $6^{\text {th }}$.
Jan 6 HLYW News Release

## HOLLYWOOD ENTERTAINMENT ANNOUNCES 2003 FOURTH QUARTER SAME STORE SALES

PORTLAND, OREGON - January 6, 2004 - Hollywood Entertainment Corporation (Nasdaq: HLYW), owner and operator of more than 1,900 Hollywood Video superstores and approximately 600 Game Crazy video game specialty outlets, today announced that same store sales for the fourth quarter increased $12 \%$. Contribution to same store sales from rental product revenue was negative $2 \%$ while contribution from merchandise sales was $14 \%$.

As a result, the Company expects net income for the quarter to be approximately $\$ 0.36$ per diluted share and expects adjusted net income for the full year to be approximately $\$ 1.40$ per diluted share.

On January 5, 2004, the Company prepaid the $\$ 20$ million 2006 amortization of its senior bank credit facility. During the fourth quarter, the

Company also used $\$ 16$ million to repurchase shares of its common stock.
The Company expects to report its fourth quarter and full-year 2003 results of operations on Thursday, January 29, 2004.

So what strikes you? This business could be dead. People are saying this business is gone. Don't touch it. So what strikes you about this news release? They have great merchandise sales (Merch. Sales up 14\%). They are buying back their stock, it is kicking off cash and they are prepaying debt. HLYW is buying back $\$ 16$ million of stock. Buying back expensive stock could be a bad thing.

They are still spending $\$ 90$ million to open stores. The CEO's interest lies in the stock, not his salary. He stopped in October 2003 his 10B-501 sales--a positive signal.

I go right to the negative $2 \%$ comps. Everyone says this business is dead. And we talked about the mitigating factors of weather and all this different stuff that can take your numbers up $5 \%$ or down $5 \%$. His comps are only down $2 \%$. Does it look like something that is going to fall off the face of the earth? It is not comping down much in the grand scheme of things. There are businesses that comp down $5 \%, 7 \%, 8 \%$ and people still think that those are great businesses.

The stock is at $\$ 14$ and for me I see he (CEO of HLYW) is looking to make $\$ 1.40$ and it is trading at 10 times next year's earnings. So that is Jan $6^{\text {th }}, 2004$

So now go to Jan $29^{\text {th }}, 2004$ when they come out with full year results.

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HOLLYWOOD ENTERTAINMENT CORPORATION REPORTS FOURTH QUARTER AND FULL YEAR 2003 RESULTS
PORTLAND, OREGON - January 29, 2004 -
Hollywood Video:
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Fourth quarter revenue and same store sales for Hollywood Video, excluding Game Crazy, were $\$ 388$ million and negative 1\% respectively...... Fourth quarter 2003 operating income was $\$ 53$ million.

Full year 2003 revenue and same store sales for Hollywood Video were \$1.5 billion and $3 \%$ respectively. For the full year, there is no material difference between "rental comps" and Hollywood Video comps. Full year 2003 operating income was $\$ 205$ million. During 2003, Hollywood Video opened 102 new stores, ending the year with 1,920 stores.

## Game Crazy:

Full year 2003 revenue and same store sales for Game Crazy were \$180 million and $15 \%$ respectively. Full year 2003 operating loss was $\$ 20$ million (after the allocation of approximately $\$ 2$ million of general and administrative expenses from Hollywood Video to Game Crazy for information services support, treasury and accounting functions, and other general and administrative services). During 2003, Game Crazy opened 319 new stores, ending the year with 595 stores.
.... Commenting on the Company's performance, Mark Wattles, the Company's Founder, Chairman and CEO said, "While I was disappointed by Game Crazy's performance in the first nine months of the year and by Hollywood Video's performance in the second half of the year, the Company still managed to grow total revenue by $13 \%$ and adjusted net income by $16 \%$. To put that in perspective, we generated $3 \%$ same store sales in a mature industry, while building Game Crazy, which was
essentially a retail start-up, into one of the leading game retailers in the country."

First Quarter 2004 Guidance
Hollywood Video:
Although business has been trending weaker than expected quarter-to-date, Hollywood Video is maintaining the guidance it provided on December 1, 2003 of mid-single-digit negative same store sales for the first quarter of 2004.

Game Crazy:
Same store sales for Game Crazy are expected to range from $12 \%$ to $14 \%$ for the first quarter of 2004.

Brian Gains: So negative 1\% comps for the fourth qtr. but for the full year in 2003, the video business still comped up 3\% despite everyone thinking the business is dead. It is still comping up 3\%. He opened 102 new stores in 2003.

To put this into context, that when you start looking at multiples of operating income. What is key in Crazy? What strikes me there is that he lost $\$ 20$ million in Game Crazy, which is a start-up. It is a growing business, comping up a lot; he is allowed to lose money. At some point that--\$20 million loss (in Game Crazy) at some point will turn positive. He can stop opening new immature stores. He also has a lot of new stores with inventory in them. Even if it is a disaster, he can liquidate the inventory. So he is losing negative $\$ 20$ million. When you are looking at the poor results for Hollywood, you must remember he has one division, which he can separate. He can do all sorts of different things with where he is losing $\$ 20$ million. This division has inventory value. So you have negative $\$ 20$ million, value of inventory and plus it is probably going positive.

In a lot of these dying businesses, you need to look at another area where they are making money. There is a reason why this could get better.

Second half of the press release.
Full Year 2004 Guidance

Hollywood Video: Assuming a neutral comparison of aggregate home video new releases during the nine months following the first quarter of 2004, and adjusting for the volatility and weakness seen over the last several months, Hollywood Video quarterly same store sales are expected to range from negative $2 \%$ to positive $2 \%$ for the last three quarters of the year. Hollywood Video is maintaining the guidance it provided on December 1, 2003 of negative 1\% to negative 2\% same store sales for the full year 2004.

In addition, Hollywood Video plans to open 150 new stores in 2004, weighted toward the second half of the year.

Game Crazy: Based on the limited information available regarding upcoming software releases and other factors affecting the game industry, same store sales for Game Crazy are expected to average mid-to-high singledigit for the nine months following the first quarter and the full year 2004.

Hollywood Entertainment Corporation:
Based on the above assumptions for Hollywood Video and Game Crazy same store sales, the planned opening of 150 new Hollywood Video stores and 150 new Game Crazy stores, and the recent volatility and weakness experienced
by Hollywood Video, the Company believes 2004 net income per diluted share could be lower than 2003 adjusted net income per diluted share, but does not expect it to be less than $\$ 1.33$ per diluted share. In addition to operating Hollywood Video and Game Crazy, the Company is evaluating other long-term strategic initiatives. Should the Company choose to pursue one or more of these initiatives during 2004, it is likely that earnings would be negatively impacted by a material amount. Assuming that no significant new strategic initiatives are implemented in 2004, the Company expects total spending for growth, including inventory and store opening expenses associated with new Hollywood Video stores and Game Crazy stores, to be approximately $\$ 90$ million.

Student: The press release seems fluffy and uncertain
Brian Gains: There are a lot of things that the CEO can't predict.
He is still not making money in Game Crazy but he is comping up 12\% to $14 \%$ (in that segment), so eventually he will make money. And the reason he is not making money is because he is opening a lot of new stores. When you open a new video store, no one shows up. It takes time to change people's patterns. It takes time for that business to mature. He is still growing Game Crazy. A lot of this relates to his owning more than $10 \%$ of the stock. What strikes me is that he is still opening video stores. He still thinks the returns are good. If you told someone who thought the business is dead that the CEO is till opening 150 new stores, they would reply that he is nuts. He owns $10 \%$ of the stock. He has more of an incentive than I do.

The CEO talks about developing a strategic initiative to develop a Netflix-like product.
The CEO knows the business better day in and day out than I do. He has the best data. Whether he is using it well is another question.

Student question: How do you assess the CEO?
Brian Gains: Look at his track record. He has been smart about his ability to grow his business. When did he buy stocks and when did he sell his stock. Is he smart with his stock? A CEO, like this one, who has been called "shady" can mean self-interested. You will hear people be effected by their emotions.

He was thinking about spending $\$ 150$ million to compete against Netflix. He will do what is right.
He is going to do something that will have a return. Maybe he thinks the return is 30\% pre-tax. Maybe he thinks it is $70 \%$ or maybe $10 \%$. I am just saying he has these parameters set and let's hope that he hits them.

Now it is Feb. March and I am starting to buy the stock. The stock is at $\$ 11.50$ to $\$ 11.50$ and it starts to trend down. Here are two years trailing:

| HLWD | $\$ \mathrm{~mm}$ |
| :--- | :--- |
|  |  |
| Basic OS | $\$ 60.3$ |
| Price | $\$ 10$ |
| MC | 603 |
|  | 145.0 |
| Cash |  |
|  | $\$ 350.9$ |
| Debt | 73 |
| NOL |  |
| EV |  |
|  |  |
| Current A |  |
| Retail Inv/ |  |
| Net PPE |  |
| Current L |  |
| Inv Cap | 449.8 |
| ROIC | $41.7 \%$ |
| EV/Op Inc | 3.9 x |
| EV/(E-MCX | $\mathbf{3 . 6 x}$ |


|  | FYE | FYE |
| :--- | :--- | :--- |
|  | $12 / 30 / 2002$ | $12 / 30 / 2003$ |
| Rental | $1,324.0$ | $1,386.5$ |
| Merchandise | 166.0 | 295.9 |
| Total Rev | $1,490.1$ | $1,682.4$ |
|  |  |  |
| Rental COGS | 447.3 | 441.0 |
| Rental GP | 39.8 | 72.3 |
| Rental GM | $24.0 \%$ | $24.4 \%$ |
|  |  |  |
| Total COGS | 573.5 | 664.6 |
| Total GP | 916.5 | $1,017.8$ |
| Total GM | $61.5 \%$ | $60.5 \%$ |
|  |  |  |
| Operating Ex | 647.8 | 724.2 |
| G\&A | 89.6 | 106.2 |
|  |  |  |
| Opera. Ex as \% | $43.5 \%$ | $43.0 \%$ |
|  |  |  |
| Op Inc | 179.2 | 187.4 |
| Margin | $12.0 \%$ | $11.1 \%$ |
| EBITDA | 244.3 | 252.5 |

What strikes you here? Really high ROIC, EBIT, good operating margin and it is really cheap. So I have operating income and I need to set a maintenance capex level. So what does it cost to keep one of these video stores going? If all hell breaks loose, nothing is good, he is not spending any money, he stops Game Crazy; he stops building new stores. What is it going to cost him to keep this business going? And 3.6 multiple is cheap and someone pointed out the Returns on Capital--it is worth noting that when you do ROC--there is a company-wide ROC and taking operating income and dividing by net working capital, his PPE (Property, Plant and Equipment) and in this case his rental inventory. And then there is the incremental returns on capital (ROC) on his new stores. And the incremental ROC on his new stores may be higher because he doesn't have SG\&A--it is just incremental. Here on the whole company he is doing a company-wide pre-tax ROC of greater than $42 \%$. It is still fantastic.

Student: What is the type of the lease? Capital or operating?
Brian Gains: This is an operating lease. They have two or three -year leases so it is not a big factor.
Student: How did you calculate Return on Invested Capital (ROIC)?
Brian Gains: So all I am doing is taking net working capital and net PPE. In this case (rental) inventory as well. I did not capitalize the leases because they are only for three years. I assumed they could break the lease if their business is not working.

Taking that as operating cost. Net of all rental cost.
Student: If the stores are having to constantly replenish inventory--is that capitalized?
Brian Gains: No. I treat it as an expense--an operating expense.
One thing you wouldn't have known--HLYW had an NOL asset. It has a net operating loss (NOL) of \$73 million so that is an asset. He will realize it all pretty quickly. That is an asset. It is important to know whether they are paying cash taxes or not. Operating income is running 187 million dollars so he will realize all of his NOL right away. With these companies with a lot of cash, it is important to understand their tax situation. Are they paying taxes in cash or not. When you are looking at multiples, you would deduct the NOL from Enterprise Value (EV).

Another thing to note--despite everyone saying the business is dying-- you went from 244 stores to 252 ; operating income was up as well. Another thing I noted was that his rental gross profit--the part of the business everyone hates--well, you can say merchandise is growing 12\%, that is not a great a business because he has lower gross margins--he took rental gross profit from $\$ 876$ to $\$ 945$ and he grew the rental gross margin. To me this doesn't look so awful. I am actually seeing a business that is trending up. And getting it for 3.6x EV/EBITDA-MCX or for a 28\% pre-tax return.

So at this point I am excited. I am buying the stock here between $\$ 10$ and $\$ 11$.
How bad is it?

| Video <br> Revenue | $\$ 1,500$ |
| :--- | :--- |
| Video SSS | $1 \%$ |
| Video Rental | $-2 \%$ |
| Video Op <br> Inc. | $\$ 205$ |
| New Video <br> Stores | 102 |
| Ending | 1,920 |
|  | $\$ 180$ |
| Game Crazy <br> Rev | $15.0 \%$ |
| Game Crazy | $\mathbf{\$ 2 0 )}$ |
| Op Inc | 319 |
| New Stores | 595 |
| EOY |  |

- Video Rental?
- Game Crazy?
- Maintenance Capex

How bad is it? He has Game Crazy where he is getting good returns and he has low MCX and everything above is a summary.

## HLYW Conclusion

Here is my final work (below). I said how many different ways can this turn out OK for me?

The normal case--what the CEO is telling you he will do in 2004--\$230 in EBITDA. His capex is: he has 2,000 stores and $\$ 10,000$ per store so $\$ 20$ million plus he has corporate capex. So let's say he just goes MCX then he has interest, so I calculate Free Cash Flow (FCF) tax adjusted is--he has a NOL but we set it aside just to be safe. Let us look at this fully taxed. He is doing $\$ 1.90$ in cash EPS. I put a 8 multiple on that so you get to $\$ 15$ per share-the business is not dying as quickly as people think

Then you say over the next year, you will get $\$ 1.90$ back in cash, that is what I talked about before--how much cash you will get back right away. You will get back $\$ 1.90$ right away. So I said, OK if this kind of works out in this fashion, if people look at it as if, OK, it were really dying; it is really bad, I could get $70 \%$.

If the people in the end say it is really a growth business, I may get something much better. Then I said it does $\$ 225$ and I am wrong on Capex and it is $\$ 35$, so maybe my return is only $36 \%$. But then you can go through these numbers and see how bad does it have to be to get to $\$ 10$ where the stock is trading. And you have to take it down quite a bit to say, OK, it is worth what it is (now). And in one case I am saying it could be worth 70\% more.

In this last example, I am saying he is losing $\$ 20$ million on Game Crazy per year. He is actually estimated to lose $\$ 16$ million for 2004, so let's add that back. Let's say he liquidates Game Crazy so interest expense is not as high because he has 500 stores; he sells the inventory. So he immediately sells that down. In that situation, he ends up with\$16 per share and $\$ 2$ in cash and he gets $\$ 18$ per share for $82 \%$ if I bought the stock at $\$ 10$ per share. So there are a lot of ways this could work out.

Businesses isn't as bad. Or if it is bad, and if MCX is what really comes into play because he realizes things are falling apart--so he stops doing it. I am still probably going to do OK. At this point I say, OK, I will take the bet.
In the worse case scenario at the end of the year, I have a $\$ 10$ stock. But I think, I make a lot of money on this. There is chance I make $80 \%$. ( $0 \%$ to $10 \%$ downside for a $36 \%$ to $82 \%$ upside).

This summarizes what I was talking about.
A lot of ways to win.......

| In \$millions | Normal Case | Base Case | Game Crazy Losses |
| :--- | :---: | :---: | :---: |
| EBITDA | $\$ 230$ | $\$ 225$ | $\$ 246$ |
| CX | 30 | 35 | 30 |
| Int. | 25 | 25 | 20 |
| FCF | 175 | 165 | 196 |
| Tax Ad | 113.75 | 107.25 | 127.4 |
| EPS | 8 x | 1.70 | 2.02 |
| Multiple |  | 7 x | 8 x |
|  | 15.2 | 11.9 |  |
| Value | 1.90 | 1.70 | 16.2 |
| Cash Gen | $\$ 17.06$ | $\$ 13.62$ | 2.02 |
| Total Value | $70.63 \%$ | $36.19 \%$ | $\$ 18.20$ |
| Return |  |  | $82.00 \%$ |

## HLYW Conclusion (cont...)

- Since CEO owns stock, he will do the right thing with high return Game Crazy
- Margin of safety from backing out Game Crazy losses, NOL, value of inventory at GC stores and bare level of Maintenance capital expenditures (MCX).
- Logical reasoning of video rental business durability.

Brian Gains: The margin of safety is the Game Crazy stores because they are losing money, but they could be making money--more upside. That is where I came to buy HLYW between $\$ 10$ and $\$ 11$.

So March $29^{\text {th }}$, 2005. Read the whole thing and what strikes you the most?
On March 28, 2004, Hollywood Entertainment Corporation (the "Company")entered into an agreement and plan of merger (the "Merger Agreement") with Carso Holdings Corporation ("Holdings") and its wholly owned subsidiary. Holdings is a wholly owned subsidiary of Leonard Green \& Partners, L.P. ("LGP"), a private equity firm that manages more than $\$ 3.6$ billion of private equity capital.... And each share of Company common stock will be converted into the right to receive $\$ 14.00$.

Mark Wattles, Hollywood's Founder, Chairman and CEO will continue in his current capacities following the merger. Mr. Wattles will exchange a substantial portion of his equity holdings in Hollywood for $50 \%$ of the common equity in the surviving company.

Brian Gains: Note that the Founder and CEO is going to take 10\% of the equity of the company--now he will take $50 \%$ of the company. So maybe he was sure, but now he is doubling down, tripling down. He won't take any cash off the table, I am going to throw all the cards in with these new guys coming in at $\$ 14$ per share. If you know Leonard Green, they are fairly well regarded. Note that the CEO thinks the business is good, now he thinks it is great. He is willing to take everything in at \$14.

So the stock rallies and everyone happy, but you see that the CEO gets to roll in for $50 \%$ of the equity. I want in on that. So I sold. The stock was trading at $\$ 13.50$ and I say there are merger arbs who can do better work than I can do (no more edge), so I sold. I will move onto the next one.

Move on to the next one and use your edge...

## If you have done the work on an industry (particularly one with a lot of angles), always look at the competitors.

--Applying HLYW take-out multiple (where CEO of HLYW is buying his own business) to Movie Gallery (MOVI) implied a $\$ 20$ stock price.

- MOVI arguably a better business so worth doing more work

So you have done all this work in understanding the Video business. Don't give up at that point. And this is where there are other people in the business. Go look for other stuff. People look at insider sales--well, here you have an insider buying half the company. You see insiders buying 10,000 shares. He (HLYW CEO) is willing to buy 30 million shares.

MOVI: This same multiple given to HLYW applied to MOVI Gallery would give you at $\$ 20$ stock.

## MOVI

- Rural version of HLYW and BBI
- Fewer than $1 / 3$ of stores compete with either HLYW or BBI
--Mainly single operator competition
- High ROIC on new stores
- Stable comps
- Rural nature implies less technology risk
- CEO owns $15 \%$ of stock
- Possibility of recap or stock buyback.

MOVI Gallery is in the rural areas of the country, so for all the talk about other entertainment options, MOVI Gallery has none of that. Plus, we will see some other stuff that makes it kind of interesting.


So it is trading right around \$20. So you are not getting a steal the day the merger happens. Maybe you are getting something good.

So MOVI has less technology risk if I was worried about that, not much competition and the comps in MOVI Gallery are still comping up and are really, really stable. The CEO of MOVI owns 15\% of the stock. This capital structure does not have debt on it.

So HYLW had some debt on it. This has no debt on it, so there is a possibility to lever it up because he has a lot of cash, you get a tax shield from putting the interest expense against the pretax income. All sorts of different things you can do.

## MOVI FINANCIALS

| Common <br> Shares | 33 mil. |
| :--- | :---: |
| Price | $\$ 20$ |
| Mkt. Cap. | $\$ 660$ |
|  | 53 |
| Cash | 607 |
|  |  |
| EV | 6.53 x |
|  |  |
| EV/Op Inc. |  |


|  | TTM 3/31/2004 |
| :--- | :---: |
| Rentals | $\$ 663.4$ |
| Product | 63.7 |
| Total Revenue | 727.0 |
|  |  |
| Rental COGS | 188.6 |
| Rental GP | 474.8 |
| Rental GM | 71.6 |
|  |  |
| Product COG | 48.4 |
| Product GP | 15.3 |
| Product GM | 24.0 |
|  |  |
| Store opex | 347.5 |
| G\&A | 49.5 |
|  |  |
| Op Inc. | $\$ 93.0$ |

He has cash on the balance sheet. I am not giving you any yr/yr stuff so you can't even take a look at those. What is interesting.... So it costs him \$12,000 to open these MOVI Gallery stores and three years out he makes $62 \%$. A mature store three years out makes $62 \%$ pre-tax returns on capital and he has been opening stores successfully. He has 2000 stores now and he is adding 200 stores a year. And this, I am sure you know this from retailers, with $62 \%$ (returns) you build all day without screwing up. $62 \%$ returns on capital, you can't probably find better alternatives.

Even in year 1, it is $35 \%$ without it being mature. Particularly, a business trading at $6 \times$ EBIT
THROWING away money?

|  | Year 1 | Mature | $\bullet$Worthwhile <br> investment? |
| :--- | :---: | :---: | :---: |
| Investment | $\$ 126$ | $\$ 126$ |  |
| 4 wall operating profit | $\$ 45$ | $62.7 \%$ |  |
| Pre-tax ROIC | $35.7 \%$ |  |  |

Now we get another piece on August $6^{\text {th }}, 2004$
August 9, 2004
PORTLAND, OR, August 6, 2004 - Hollywood Entertainment Corporation (Nasdaq: HLYW), owner and operator of more than 1,950 Hollywood Video superstores, today announced that Leonard Green \& Partners, L.P., an affiliate of Carso Holdings Corporation ("Holdings") and its wholly owned subsidiary (the entities with which Hollywood entered into a merger agreement on March 29, 2004), has informed Hollywood that, due to industry and market conditions, Leonard Green \& Partners believes that the financing condition to the consummation of the merger will not be satisfied.

Hollywood and the Special Committee of its Board of Directors are considering Hollywood's alternatives to determine the course of action that would be in the best interests of Hollywood's shareholders. There is no assurance that a merger with Holdings will be completed, or if completed, that it would be completed on terms that do not differ materially from those in the merger agreement.

It is kind of vague, but it --what is the most important sentence here besides you lose if you are in the stock and you are an arb.--Leonard Green is bowing out because of the financing condition. It wasn't because of the conditions or quality of HLYW's business. Leonard Green probably couldn't get something done in the high yield market. They are saying, we are not leaving the deal, but we don't like it at $\$ 14$. So you can guess what happens now, so the stock trades back to $\$ 10$. You know the financing didn't get done, the numbers are probably OK and you are back to where you were.

## Everybody loves a good spin

- Viacom adds 1B of debt to Blockbuster and says don't let the door hit you on the way out.
- Ramifications of the newly independent BBI?

MOVI has traded down a little bit that day. At the same time as this, BBI is trending lower. Coincidently BBI pays a special dividend to Viacom after being spun-off from Viacom. Everything is bad at HLYW, Summer Redstone over at Viacom says BBI gives me a lower multiple, I am sick of it, get rid of it and at the same time
pay a special dividend-\$5. They kick it off. BBI had everything to look for in a spin-off that may be hated—big debt load, bad industry, etc. Now BBI is completely independent. I missed this. I didn't get it.

## More Chances to win..

- HLYW and MOVI trade down
--Significance of MOVI capital structure?
- Is MOVI affected?
- CEO of HLYW's thoughts?
- BBI?

HLYW and MOVI traded down. Since MOVI has cash on the balance sheet, a trade down in MOVI Gallery is huge, because it is cash rich. Any fall off in price is pretty significant on a multiple basis.

Is MOVI affected by what happened? NO.
What is the CEO of HLYW thinking about everything that is going on around him. This is the CEO who wanted to triple down. Does he care where the merger happens--he would prefer a lower price. He is more excited if Leonard Green comes back and offers \$3. A take-under.
...and then it becomes a food fight

- Leonard Green comes back on 10/14/04 and offers $\$ 10.25$
- On November $11 / 11$, BBI confirms interest to acquire at $\$ 11.50$
- Movi offers to acquire HLYW at \$13.25.

Leonard Green shows up again on Oct $14^{\text {th }}$. We will do it for $\$ 10.25$, then they hang around. Classic private equity guys who say, the CEO doesn't care about a lower price, so let's offer $\$ 4$ less. Then a wrench gets thrown in their plans, because a newly independent blockbuster comes back says they will do it for \$11.50. Then MOVI gets interested to acquire at $\$ 13.25$. All these strategic buyers get excited. With a key event, you had a BBI spin-off and you had L. Green get greedy and then a food fight begins. It is funny how this stuff works. L Green woke everybody up to it is not so bad. Everything transpired from there.

The HLYW's CEO offers to acquire half of HLYW's stores.
What I did when the merger announcement came out when Movi was going to acquire HLYW at \$13.25, I said BBI runs into anti-trust problems because they have $60 \%$ of the market. You do some quick math on MOVI and say wow this is a home run. You can say they can cut costs, they can do the same thing as L. Green.

I am in MOVI but not in HLYW the second time around. Putting a 8 multiple on MOVI's $\$ 3.50$, you could get a $\$ 28$ stock. So you could get really excited with MOVI if they get it and if they don't, then a lot of time in these mergers, BBI is forced to sell off stores if BBI were to acquire HLYW, then MOVI could acquire those stores on the cheap.

Another thing about BBI's bid is that it is in cash and stock. And any Board of Directors will favor cash over stock. It is the easier to go with the cash bid. BBI is at a disadvantage because they have too much debt. This is what is happening with Quest and Horizon--MCI's Board is saying we want to go with Verizon since they are offering cash.

The HLYW's Board is tired. They know there is very little upside. They know it will be acquired. The Board personally does not want to be sued. Clean this up and get out of town.

## Dynamics of merger

- Ex-Hollywood CEO comes out and wants to buy 1/2 HLYW stores
- MOVI All cash bid
--Quick math on MOVI acquisition says they could do \$3.50 in EPS if they acquire HLYW
- Concessions from BBI if they don't win
- No overlap
- BBI issues
--Antitrust
--Cash and stock bid
- Implications for the board

So we will just finish up the story. HYW trades back to $\$ 14$ and MOVI to $\$ 26$. BBI pops as well. You could do well in any of these companies.


## END

## Questions and Answers

I put $10 \%$ in HLYW, since I did all my work, I knew the downside was $\$ 9$ to $\$ 10$ and the upside was good. For $m e, 20 \%$ would be huge, but $10 \%$ is usually my position.

What is your best bet--MOVI seemed better.
If you knew MOVI was a sure deal to acquire HLYW, then MOVI would be over $\$ 30$.
In the end, people rent videos near where they live. With BBI, will it be able to be successful against Net-flix?
END
CASE STUDY

## Prize:

Pretend you have traded in your hush puppy shoes or sandals in for a pair of wing-tips. You are now an investment banker who is being asked to help Munsingwear, Inc. "enhance shareholder value." How would you advise the CEO in improving their operations and profitability? Your fee, if your advice salvages value for shareholders and/or turns this company around, would be \$300,000.

## Instructions:

Use only what is in this case study for your analysis. If you feel critical information is lacking, then state what is missing and how it prevents you from advising your client. You will have a chance to speak to the CEO, Mr. Lowell Fisher, in class.

After reading the $10-\mathrm{K}$ what would you advise? Why? Please give no more than a written paragraph answer. Provide a brief pro-forma of your analysis if necessary. What value might you put on the company after your recommendation? Show work and assumptions.

This case test your strategic thinking ability and business sense.

Good luck in your new wing tips!

## Munsingwear, Inc. Case Study

FORM 10-K

For the fiscal year ended January 6, 1996
Munsingwear, Inc.
IRS \# 41-0429620
8000 W. $78^{\text {th }}$ Street, Suite-400, Minneapolis, Minnesota 55439
Telephone number: 612-943-5000
Delaware: State of Incorporation
The aggregate market value of the voting stock held by nonaffiliates of the Registrant at April 1, 1996 was $\$ 9,384,000$ based on the closing price of $\$ 7.25$ per share at that date.

The number of shares of common stock outstanding at April 1, 1996 was 2,037,078

## A. GENERAL DEVELOPMENT OF BUSINESS

The Company was incorporated under the laws of Delaware in 1923 as the successor to a business founded in 1886. The Company's principal executive offices are located at 8000 W. $78{ }^{\text {th }}$ Street, Suite- 400 , Minneapolis, Minnesota 55439, and its telephone number: 612-943-5000. As used in this document, the term "Company" refers to Munsingwear, Inc. and its subsidiaries unless otherwise noted or indicated by the context. At Jan. 6, 1996, the Company had one subsidiary, Munsingwear UK Limited, which was idled in 1994.

After suffering a severely weakened financial condition, primarily due to losses of \$89, 243,000 during the years 1989 through 1990, the Company, on July 3, 1991, filed a voluntary petition for bankruptcy under Chapter 11 of the US Bankruptcy Code, together with a proposed Plan of Reorganization. The Company emerged from bankruptcy on Oct. 29, 1991.

Prior to the reductions in operation implemented during 1989 through 1991, the Company designed, manufactured and distributed a broad range of men's and children's apparel through several operating divisions and subsidiaries. Today the Company's operations consist of what was formerly the Men’s Apparel Division and sell primarily men’s knit sport shirts under the following major brands or labels: Munsingwear ${ }^{\circledR}$,

Grand Slam ${ }^{\circledR}$, Grand Slam Tour ${ }^{\mathrm{TM}}$, Penguin Sport ${ }^{\mathrm{TM}}$ and Slammer ${ }^{\circledR}$. In addition, the Company licenses its trade names and trademarks for use in a variety of products.

In the recent two fiscal years, the Company's sales by channel of distribution have undergone significant change. In 1995, sales to premium/special markets and golf Pro shop customers rose $52 \%$ collectively over 1994. This is the result of management's attempt to reduce the Company's reliance on sales to traditional retail apparel channels of distribution where heavy promotional pricing, discounting and advertising activities are required.

In late 1995, the Company retained the services of an investment banking firm to explore a range of opportunities to maximize shareholder value.

## B. FINANCIAL INFORMATION ABOUT INDUSTRY SEGMENTS

The Company operates in one industry segment, apparel manufacturing. As of Jan. 6, 1996, the Company's foreign operations were not material.

## C. NARRATIVE DESCRIPTION OF BUSINESS

Principal Products:
The Company sells primarily men's knit sport shirts under four major brands or labels: Munsingwear ${ }^{\circledR}$, Grand Slam $\circledR^{\circledR}$, Grand Slam Tour ${ }^{\text {TM }}$, and Penguin Sport ${ }^{\mathrm{TM}}$. Grand Slam $\circledR^{\circledR}$ and Penguin Sport ${ }^{\mathrm{TM}}$ products are sold primarily to department stores, specialty stores and Sears. Munsingwear ${ }^{\circledR}$ products are sold primarily to premium/special markets customers and to national chain stores, such as Montgomery Ward. Grand Slam Tour ${ }^{\mathrm{TM}}$ is sold primarily through golf pro shops.

Sources and Availability of Raw Materials and Products:
Approximately 60\% of the Company's products are manufactured domestically. The other $40 \%$ is sourced primarily from manufacturers in the Far East through a relationship with Associated Merchandising Corporation (AMC). The Company also sources some product through the 807 program in the Caribbean Basin. The principal raw materials used in the domestic production process are cotton, synthetic and cotton/synthetic blended goods obtained principally from United States sources. The Company purchases most of its piece goods from approximately ten sources. There are currently no major problems in availability of raw materials and alternative sources are available. The Company's Fairmount, NC manufacturing facility includes a material warehouse, cutting, sewing and embroidery operations, and finished goods distribution center. The company also utilizes contract swing manufacturers in close proximity to its North Carolina facility to meet demand during peak production periods. All products, both domestically and offshore produced, are distributed to customers from the North Carolina facility.

Trademarks and Trade Names:

In 1991, management initiated the strategy to actively pursue licensing as a vital part of the Company’s growth plan. During the period 1991 through 1993, the Company entered into eleven license agreements, and in 1994, renegotiated its licenses with Fruit of the Loom which, among other things, extended the original agreement for twenty-five years. In 1995, the Company entered into four additional license agreements. Management intends to continue development of its licensing programs and believes that its advertising, styling and brand name identification established over many years are important to the competitive position of the company. The Company has the following license agreements:

* A license with Fruit of the Loom, Inc. to market underwear and active wear.
* A license with a New York entity to market sleepwear.
* Five licenses with Montgomery Ward to market men’s pants, outerwear, accessories, dress wear and shirts.
* A license with a Canadian corporation to market knit shirts.
* A license with a North Carolina entity to market men's and boys' hosiery.
* A license with a Peoples Republic of China entity to market a variety of clothing and accessories.
* A license with a South Carolina entity to market sweaters.
* A license with a Missouri entity to market outerwear.
* A license with a New York entity to market woven shirts.
* A license with a South African entity for apparel.

Management's emphasis on licensing activities in recent years has led to a dramatic increase in the Company's royalty income, from \$1,162,000 in 1991 to \$4,609,000 in 1995.

Seasonal Aspects of the Business:
Sales of the Company's products can vary significantly by season, with peak shipments normally occurring in the first and second quarters of the fiscal year.

## Working Capital Practices:

The Company maintains a secured bank line of credit to meet its working capital needs. Peak borrowings under this agreement normally occur in the first six months of the year during the heavier shipping period and during the fourth quarter when inventories are increased to meet the additional first and second quarter sales volume. Seasonal increases in inventory are normal for the apparel manufacturing industry. The bank line of credit is also used for letters of credit that are required for generally all of the Company's purchases from offshore sources. The Company allows returns of merchandise as a result of shipping errors, damaged merchandise and for other reasons. Returns have been less than $4 \%$ of sales in each of the past two years.

## Customers:

The Company sells to approximately 4,500 customers. Sales to Sam's Club (a division of Wal-Mart Stores, Inc.) in 1994 and 1993 were $16 \%$ and $21 \%$, respectively, of net sales. In 1995, no single customers represented more than $10 \%$ of total Company sales.

## Backlog of Orders:

The Company's backlog of unfilled orders at January 6, 1996 was approximately $\$ 15,600,000$ as compared to $\$ 18,800,000$ a year ago. The decrease was due primarily to management's emphasis on reducing reliance on traditional retail apparel customers. The unfilled order backlog does not necessarily relate directly to future sales.

## Competition:

The apparel industry in the United States is highly competitive and characterized by a relatively small number of broad line companies and a large number of specialty manufacturers. In addition, there are unbranded and private label competitors as well as numerous, small specialty manufacturers competing with the Company. The principal methods of competition in the apparel industry are pricing, styling, quality (both in material and production), inventory replenishment programs and customer service. The Company seeks to maintain its competitive position in the markets in which it operates through the use of all these methods.

Research and Development:

The Company is involved in limited experimental research activities related to the development of new fabrics and production methods. Research and development expenses, other than for product design, are not significant.
Environmental Considerations:
The Company's manufacturing operations are subject to various federal, state and local laws restricting the discharge of materials into the environment. The Company is not involved in any pending or threatened proceedings which would require curtailment of its operations because of such regulations. In 1995, the company's capital expenditures for environmental control facilities were not significant, and no significant capital expenditures related to environmental issues are projected in 1996.

## Item 1: Employees:

As of January 6, 1996, there were 343 employees, none of whom were represented by a union.

## D. FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES

Sales to unaffiliated foreign customers located outside the United States and its territories for the past three years were not significant.

## Item 2. Properties

At January 6, 1996, the Company occupied the following properties:
Management considers facilities adequate for current operations. At Jan. 6, 1996, no facilities were occupied Under capitalized leases.

| Property | Sq/ Footage | Approx. <br> Percentage <br> Utilized | Lease Expires |
| :--- | :---: | :---: | :---: |
| Minn., MN HQ | 29,200 | 50 | 1996 |
| Fairmont, NC - Cutting and sewing plant, <br> warehouse and distribution center | 139,100 | 100 | Owned |
| New York, NY - Sales office/showroom | 1,000 | 100 | 1997 |
| Dallas, TX - Sales office/showroom | 500 | 100 | 1996 |

## Item 3. Legal Proceedings

None of a significant nature.

## Item 4. Submission of Matters to a Vote of Security Holders

None.

## Executive Officers of the Registrant

The following information is furnished with respect to the Company's executive officers as of the date hereof, pursuant to Item 401 (b) of Regulation S-K. Each of the officers has been appointed to serve in his respective office until his successor has been elected.

| Name and Age | Position | Officer Since |
| :--- | :--- | :--- |
| Lowell M. Fisher (63) | Director of the Company; <br> President and CEO, October 1993 <br> to | 1993 |

## ABOUT THE COMPANY

The Company was founded in 1886 as a manufacturer of men's underwear. Throughout the early 1900's, the Company was an innovator of new textile and apparel manufacturing processes and, during the 1940's and 1950's, expanded its product lines, acquired a women's intimate apparel company and, in 1955, introduced the Gran Slam (R) collection of golf apparel bearing the well-known Penguin ${ }^{\circledR}$ emblem. During the 1960’s and 1970’s, manufacturing facilities were added, textile research and development departments were established and the Company entered into numerous licensing agreements for the use of its trade names and trademarks.

Today the Company derives its revenues primarily from the sale of men’s sportswear apparel and the licensing of men's underwear, active wear and other related apparel. The Company's products are sold primarily through premium/special markets, department stores, golf pro shops, national chain stores, specialty stores, sporting goods stores and wholesale clubs. The Company designs, manufactures, imports, markets and licenses branded men's lifestyle apparel under the Grand Slam ${ }^{\circledR}$, Grand Slam Tour ${ }^{\circledR}$, Munsingwear ${ }^{\circledR}$, and Penguin Sport ${ }^{\text {TM }}$ labels. The Company is headquartered in Minneapolis, MN and has 343 employees in company-wide operations.

## LETTER TO STOCKHOLDERS

Revenues for 1995 were $\$ 56.1$ million, a $34 \%$ increase over last year. Dramatic sales growth in our premium/special markets and golf pro shop businesses more than offset a small decline in business with our traditional customers, such as department and specialty stores, national chain stores and wholesale clubs. Premium/special markets volume increased seven-fold while golf Pro shop volume increased 52\%. In 1995 these two businesses represented $40 \%$ of our total sales volume and are expected to exceed $50 \%$ of total Company sales in 1996. As recent transition the Company has undergone over the past two years, significantly reducing our exposure to the difficult retail apparel marketplace.

Royalty income was up slightly to $\$ 4.6$ million. As a reminder, 1994 royalty income had increased $25 \%$ as a result of additional license agreements and a twenty-five year extension to the Fruit of the Loom license, which will also lead to lower cash receipts from existing licensing agreements starting in 1996. The Munsingwear trade names and trademarks have always signified quality to the licensing market and we will continue to actively pursue additional license agreements.

While we achieved significant revenue growth in 1995, we were not successful in becoming profitable. The loss of $\$ 2.3$ million, $\$ 1.13$ per share, was primarily the result of deep markdowns on excess end-of-season merchandise related to the retail department store channel of distribution, losses related to an unsuccessful entry into "Friday-wear", increased advertising expenses in support of the retail department store business and restructuring costs related to completed staff reductions and reduced office space requirements. In addition, costs associated with our PGA Tour endorsement program increased, yet we feel this program is necessary to give Munsingwear brands consumer exposure. We were successful in reducing selling, general and administrative expenses as a percent of sales - from $32 \%$ in 1994 to $27 \%$ in 1995. Interest expense was up significantly due to inventory build-up required to service the explosive sales growth in the premium/special markets business. Throughout the year we also experienced higher than planned levels of inventory for the retail department store business, which did not meet sales forecasts. Ultimately, we sold this inventory at deep discounts.

Looking ahead to 1996, we plan to continue to grow the premium/special markets business which has achieved exceptional results the past two years. Munsingwear's strong consumer brand recognition, the Penguin logo, quality product and the agility to merchandise across a broad product line give us a competitive advantage. We are confident that increased revenues and a return to profitability will be achieved due to the following:

- Continued strong sales growth in premium/special markets and golf pro shop businesses.
- Cost reduction programs.
- Continued focus on core capability - men's, short sleeve, knit, and moderately priced golf shirts.
- Innovative designs and fabrics throughout all product lines.
- Continued upgrading of management information systems.
- Strengthening of our Board of Directors by the addition of three new members, Thomas D. Gleason, who was named non-executive Chairman of the Board in January of this year, and Kevin S. Moore and William J. Morgan, who represent the Company's two largest single stockholders.

In late 1995 we retained the services of an investment banking firm to help us explore a range of opportunities to maximize shareholder value, and we expect this activity to accelerate in 1996. Please refer to the Management's discussion and analysis section in this annual report for additional financial analysis and a statement regarding forward-looking information.

Although 1995 was a difficult year for retailing, the Company achieved extremely promising revenue growth in our two most profitable businesses—premium/special markets and golf pro shops. These results reaffirmed our decision to continue the Company's transition - expanding markets, enhancing product quality, increasing consumer value and investing in infrastructure. As a result, we are now in a much stronger strategic position and I look forward to working with Tom Gleason and the Board in continuing our efforts to ensure the longterm success and profitability of the Company.

In closing, I would like to thank our customers, suppliers and lender, who have continued to support us throughout the Company's transition. Finally, I would like to take this opportunity to thank all Munsingwear employees for their hard work and effort which led to spectacular 1995 sales growth and reinforces our optimism for 1996.

Sincerely,
/s/ Lowell M. Fisher
Lowell M. Fisher, President and CEO.
CONSOLIDATED STATEMENTS OF OPERATIONS
(AMOUNTS IN THOUSANDS, EXCEPT PERSHARE DATA)

| MUNSINGWEAR, INC. | Year Ended January 6, 1996 | Year Ended January 7, 1995 | $\begin{gathered} \hline \text { Year Ended } \\ \text { January 1, } 1994 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| REVENUES |  |  |  |
| Net Sales | \$ 51,512 | \$ 37,407 | \$ 37635 |
| Royalties | 4,609 | 4,528 | 3,624 |
|  | 56,121 | 41,935 | 41,259 |
|  |  |  |  |
| EXPENSES: |  |  |  |
| Cost of goods sold | 42,714 | 30,029 | 28,783 |
| SG\&A | 13,961 | 12,134 | 11,869 |
| Restructuring costs (Note 9) | 520 | --- | --- |
| (Gain) loss on closing of facilities (Note 9) | --- | (100) | 450 |
|  | 57,195 | 42,063 | 41,102 |
| OPER. INCOME (LOSS) | $(1,074)$ | (128) | 157 |
| Interest expense | $(1,158)$ | (353) | (286) |
| Other | 2 | 177 | (74) |
| Loss before inc. taxes and extraordinary item | $(2,230)$ | (304) | (203) |
| Provision for inc. taxes | 105 | 108 | 139 |
| Loss before extraordinary item | $(2,230)$ | (304) | (203) |
| Extraordinary loss from early debt extinguishment | --- | 161 | --- |
| NET LOSS | \$ $(2,335)$ | \$ (573) | \$ (342) |
| Net Loss per common share: |  |  |  |
| Loss before extraordinary item | \$ (1.13) | \$ (.20) | \$ (.16) |


| Extraordinary item | --- | $(.08)$ | --- |
| :--- | :---: | :---: | :---: |
| NET LOSS PER CS | $\$(1.13)$ | $\$(.28)$ | $\$(.16)$ |
| Weighted avg. OS | 2,066 | 2,066 | 2,093 |
|  |  |  |  |

The accompanying notes are an integral part of these financial statements
CONSOLIDATED BALANCE SHEETS (AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA)

|  | January 6, | January 7, 1995 |
| :---: | :---: | :---: |
| ASSETS |  |  |
| Current Assets: |  |  |
| Cash and CE | \$62 | \$ 73 |
| Receivables: |  |  |
| Trade, net of allowance of \$511 and \$442 | 8,260 | 4,852 |
| Other | 277 | 286 |
| Inventories | 14,641 | 14,219 |
| Prepaid expenses | 1,004 | 1,286 |
| TOTAL CURRENT ASSETS | 24,244 | 20,716 |
| PP\&E |  |  |
| Land | 15 | 15 |
| Buildings and leasehold improvements | 568 | 550 |
| Machinery and equipment | 3,928 | 3,041 |
|  | 4,511 | 3,606 |
| Less accumulated D\&A | 1,584 | 1,330 |
|  | 2,927 | 2,276 |
| TRADEMARKS net of accumulated Amortization of \$1,274 and \$1,010 | 4,173 | 4,437 |
| Deferred taxes, NET OF VALUATION ALLOWANCE OF \$11,796 AND \$11,151 | 2,309 | 2,309 |
|  | \$ 33,653 | \$ 29,738 |
| LIABILITIES AND STOCKHOLDERS' EQUITY |  |  |
| CURRENT LIABILITIES: |  |  |
| Line of credit borrowings | \$ 10,890 | \$ 5,592 |
| Current maturities of long-term debt | 21 | 19 |
| Accounts payable | 5,008 | 3,760 |
| Accrued payroll and employee benefits | 1,009 | 1,028 |
| Unearned royalty income | 2,993 | 3,159 |
| Other accruals | 397 | 311 |
| TOTAL CURRENT LIABILITIES: | 20,318 | 13,869 |
|  |  |  |
| LONG-TERM LIABILITIES: |  |  |
| Long-term debt, less current liabilities | 22 | 38 |
| Postretirement benefits | 319 | 312 |
| Unearned royalty income | 10 | 200 |
|  | 351 | 550 |
| TOTAL LONG-TERM LIABILITIES | 351 | 550 |
|  |  |  |
| STOCKHOLDERS' EQUITY |  |  |
| Common Stock, \$0.01 par value 2,065,594 shares issued and issuable | 21 | 21 |
| Additional paid-in capital | 15,112 | 15,112 |
|  | $(2,149)$ | 185 |



## END

## Interview with Value Investor Joel Greenblatt

By Bill Mann (TMF Otter) December 21, 2005

The Little Book that Beats the Market. Audacious title? Maybe, but Joel Greenblatt has the chops and the record to back it up. His investment returns are amongst the most incredible in investing, with returns exceeding $40 \%$ per year over the last 2 decades.

Bill Mann: One of the things that you talked about in the beginning of this book is that you felt like your first book, You Can Be a Stock Market Genius, was a little more advanced than you had intended it to be. So you wrote The Little Book that Beats the Market with your kids in mind. Describe for us some process that you went though in creating the book?

Joel Greenblatt: Oh sure. Well, the way it really happened was is that there are a few simple things I have been teaching for ten years over at Columbia. My students are always accusing me of making things sound too simple, so we sort of boiled down to what we have done for the last twenty years at Gotham Capital to a couple of important concepts.

What those concepts were were buying good companies at bargain prices. The way we define "good companies" was companies that earn a high return on capital. What that might mean is that if for instance a company opens stores and each store costs $\$ 400,000$ and you can earn $\$ 200,000$ on a store, that is a $50 \%$ return on capital. If another company opens stores that also cost $\$ 400,000$ but they only earn $\$ 10,000$ a year, that is a $2.5 \%$ return on capital. Simply, we said, "gee, the company that earns $50 \%$ a year on the capital invested is a lot better than the one that earns $2.5 \%$." That is generally the course we have taken to define what a good company is, something that earns a high return on capital. Then we said, "Let's try to buy those good companies cheaply." The way we defined "cheap" was companies that earn a lot relative to the price we are paying. So we call that earnings yield, which is the inverse of $\mathrm{P} / \mathrm{E}$. So that just means that if you can buy a lot of earnings for a cheap price, that makes the company cheap.

So if we can buy a good company that is also cheap, in combination that strikes me as being a good thing. That is what we tend to look for when we are looking for investments at Gotham Capital. Those concepts are not too hard for kids to understand. If you explain to them that way, that I am just trying to buy good companies at bargain prices, they tend to understand that.

It's very important that you understand what you are doing, not just following what I call the Magic Formula. If you are just following a Magic Formula, that formula doesn't always work. But if you understand what you are doing, you will say, "you know what? It just makes sense to buy good companies at bargain prices and eventually this will work." We did a study showing that large-cap companies can double the market's return just following this formula. With small caps, you could actually almost triple the market's return.

Bill Mann: I wanted to make this point. When you say "we", you are talking about Gotham Capital.
Joel Greenblatt: My partners at Gotham Capital, yes.
Bill Mann: And just to be clear, this is part of the process that you have used to manage money at Gotham Capital for more than 20 years.

Joel Greenblatt: Yes. The Magic Formula from the book is not something that we fished around for by back tested extensively, using 40 different formulas until something looked like it worked. This is the absolute first thing that we tried, and the inputs approximate how we invest professionally. So when we talked about components for a back test we thought "Let's keep it simple. Let's look at what companies do. If we rank them based on earnings yield and return on capital and picked the companies with the best combined ranking of those two factors, how would a portfolio of stocks like that do?" That is what we back tested and that was the first thing we tested and that is what I wrote up in the book because it is so simple and obvious.

There is a slight difference in what we do at Gotham Capital. For my kids, I did not think they were capable of projecting earnings out into the future. At Gotham Capital what we do is, instead of using least year's earnings, which is what we used for the Magic Formula and what got those great results of double and triple the market's returns, we used what we think normal earnings will be several years out, three or four years from now.

We can't make those projections for most companies, but for the companies that we can make those projections for, or we feel confident about our projections, then we plug those into the Magic Formula rather than last year's earnings. So there are two really different strategies that we use. One, for the Magic Formula when we are looking at last year's earnings, we buy a portfolio stock, either 20 or 30 companies because on average,
they do incredibly well, were the results I just mentioned. For Gotham Capital, we do a much more concentrated portfolio, perhaps five or eight companies, generally are $80 \%$ of or portfolio, and those are companies that instead of plugging in last year's earnings, we plug in our projections for normal earnings several years out for the company, but we are actually plugging it in to the Magic Formula.

So we are more concentrated and we do a lot more work on each company that we own because of that. For most investors who don't do this for a living, they are better off looking at last year's earnings and buying a portfolio of 20 or 30 companies that on average will do tremendously well.

Bill Mann: It is such an important concept and one of the facts that I thought was great about the book is that you are not talking about what will be. You are not talking about laser beams and dental technology and all of these things that people get excited about that may not have earnings at present. The basis for the Magic Formula rests upon what is, what earnings the company already has generated.

Joel Greenblatt: That is really I think what people can do. There is no argument about it. You know what happened last year and that is all you need to know.
I wouldn't suggest people, without doing any work, pick individual stocks, but if you are willing to own a 20 or 30 stock portfolio based on these simple concepts, on average you are going to do tremendously well.

Bill Mann: What about the argument of if this works very well with the 20 and 30, why wouldn't you pick the top three and concentrate? I mean, if you could determine what they were.

Joel Greenblatt: Even though what I said in the book was the formula actually works in order. In other words, we take the combined ranking of cheap and good companies and we combine those ranks into a Magic Formula ranking.
I said in the book that if you divide all 3,500 companies we modeled into deciles where you take the top $10 \%$ as ranked by the Magic Formula then the next $10 \%$ then the next $10 \%$, the Magic Formula works in order. The top decile beats the second decile, and so on. That's over a large amount of stocks so there really is not much statistical difference between picking any of the top let's say, 25 stocks versus one, so the top three don't necessarily do better than number 22 to 24 .

Bill Mann: And you would in fact increase risk by being concentrated because you are trusting a formula.
Joel Greenblatt: Right, on average it works so to just pick a few names, if you have something on average that works, you might as well shoot for that average. You may do better with the three stocks, but you may do a lot worse. If you have almost a sure thing, why throw it away?

Bill Mann: One of the things that you did in the study was to bifurcate what would you do if you concentrated on the largest companies and then you went down as low as $\$ 50$ million. What about going smaller than that?

Joel Greenblatt: It should work amazingly well there, but I didn't want to write a book that people couldn't execute and I also wanted to show how robust the Magic Formula was. It worked amazingly well with small caps. Using a small cap model of 30 stock portfolios that we tested over the 17 years, it earned over $30 \%$ a year.

It is just that I want to make sure people realize that the formula was very robust and that you could actually execute, you could actually buy enough stock and if you are buying a book that hopefully a lot of people will read, we even showed how it worked for the top thousand companies.
It didn't work quite as well as with the small caps because there are many more small caps to choose from than large caps, but it worked incredibly well. It more than doubled the market's return. Tough to beat that.

Bill Mann: So if a company that trades 50 shares a day and shows up on that list, that makes it functionally irrelevant for most investors because you can't execute a trade.

Joel Greenblatt: Well, we didn't just have a minimum market cap, we also had a minimum trading requirement so that you actually had to be able to trade these stocks to be put into our model. Sure, the small investor has many advantages over the large investor and if you aren't running so much money that you are
prevented from buying smaller cap stocks, then you have a big advantage. You can choose from a lot more companies.

Bill Mann: Because you're dealing with a mechanical strategy, one of the books that people will inevitably make a parallel to is Jim O'Shaughnnessy's What Works on Wall Street. How is this different from what O'Shaughnessy did?

Joel Greenblatt: Well number one, he tested dozens of formulas over a long period of time and then picked the ones that worked the best. What we did is we picked a formula based on what we actually do, and we tested it. This was it. This formula ranks stocks in order from best deciles to worse and so it wasn't just picking the top outliers. It was really actually picking what we think goes into making money in the stock market, which is buying good companies when they are cheap, so it was really done somewhat differently. I actually thought Jim O'Shaughnessy's book was excellent.

Bill Mann: I absolutely agree. The early history of The Motley Fool was built partially around Jim O'Shaughnessy's work, so I certainly am not casting aspersions. As you mentioned, there is a mutual fund company now that runs some of his formulas and does very, very well. [Editor's Note: That mutual fund company is Hennessy Advisors (Nasdaq: HNNA), which we have highlighted as a Tiny Gem.]

Joel Greenblatt: Well, it is very interesting what happened. I actually wrote up the history of formula-based investing system where a fund did start using one of O'Shaughnessy's formulas and did very badly for the first three years. The fund didn't do well and the fund manager ended up selling the company and then the person who bought it continued with the same formula and ended up doing very well right afterwards. So since inception that fund has done incredibly well yet the original investors and the original fund manager are gone because it didn't do well in the beginning.

I think that is what so great about the Magic Formula. It doesn't always work. If it always worked, everyone would do it. There are one, two or three-year periods of the Magic Formula that we are talking about where it doesn't beat the market, but over long periods of time, it always beats the market and that is very, very powerful.

I used the example, the concept of $2+2=4$. Everyone knows that that is the case and no matter what anyone tells you, $2+2$ always equals four. It doesn't matter how smart they are, how long they tell you, you are going to stick to your guns. So you will also stick to your guns if you understand what you are doing here, which is if you truly believe what you are doing is buying good companies at bargain prices, you will keep doing it because it makes sense, even though the market doesn't agree with you for long periods of time.

Bill Mann: We saw in the late 1990s where a lot of companies that were just making a lot of money were very, very cheap because it seemed like the investor class as a whole was distracted by things that ended in dot com.

Joel Greenblatt: Well, that is the best example. In the year 2000, we owned a lot of good companies at cheap prices that the market didn't really care about and we weren't doing very well with them. On top of that, we thought the Internet bubble was going to burst any day because stocks were at ridiculous prices and wouldn't that drag down our investments along with the crash in the Internet stocks that we eventually thought might take place, but we decided "hey, listen, we own good companies at bargain prices. We are just going to just keep doing what we know makes sense."
What ended up happening is the market did get crushed. The S\&P got crushed. The NASDAQ got crushed in 2000 , yet our portfolio was up more than $100 \%$, so if that doesn't tell you to stick with what you think makes sense, I don't know what will. So the market could do badly but as long as you are doing smart things, over time you will do quite well.

Bill Mann: I think that was one of the things about the Magic Formula that immediately attracted me. It wasn't something where you said "Well, if you buy it on the first Thursday of the month, it works out better." These are two very defensible investing components. They are at the core of what good value investing is.

Joel Greenblatt: Well, I would say that I have learned a lot. One of the reasons I wrote this book is because I am really a self-taught investor even though I got a BS and an MBA from Wharton, As far as investing, all they taught me was that you can't beat the market.

Investing I learned from reading and I was reading books by Benjamin Graham. I was reading the writings of Warren Buffett. Those are the things that really taught me. The readings of David Dreman and so Graham and Dreman taught buying cheap is a good thing to do and it works over time. Buffett added the component of buying good companies when they are cheap.

I wouldn't presume to say oh, this is a formula that is similar to Warren Buffett, but what I would say is that the concepts are the same. Buffett says "I am going to stick to good companies and buy them when I can buy them at a good price." This is systematically what the Magic Formula does for you except you get to choose from a lot larger universe of stocks than Buffett does now that he is running $\$ 80$ billion.

Bill Mann: It's interesting that you mention what you didn't learn about investing at Wharton. A lot of individual investors will look immediately to what schools a person has gone to or as they say, "this person obviously has to know about investing. He has a Harvard MBA." But reality is so much different, except, it seems, at one place - Columbia. You teach at Columbia Business School, so you may really be able to speak to this. Columbia is really unique in that it has a long history of actually teaching investing to students.

Joel Greenblatt: Well I always start each class to my students and say, "I aim to teach the class that I wish I had when I went to business school." I want to give young people the benefit of the experience that I have been through. From a practical standpoint in investing this is hugely beneficial. Every investor makes tons of mistakes. It doesn't matter whether they are Warren Buffett or how long they have been doing it or everything else, people make mistakes over time. That is not the problem. The problem is sticking to continually trying to do things that make sense over long periods of time.

I think that is the most important thing to teach people. What does make sense? You are valuing companies and you are trying to buy them at a discount. Of course you will make mistakes valuing companies. This is a guarantee I give to all of my students. I say if you do a good job valuing companies, the market will agree with you. It could take two or three years. It usually takes only at most two or three years, but eventually the market will agree with you, as long as your evaluation work is correct.
I think statistically that is what we are trying to do with the Magic Formula, which is we are buying a group of companies that are in good businesses on average, that are cheap on average and that group of companies will go back to fairly priced within not too long a time, especially if you follow the strategy over a period of years, and you are almost guaranteed to make money over the long term, if you are patient.

Bill Mann: Why do you suppose that most business schools teach that those discounts don't exist?
Joel Greenblatt: You know, I think business schools 40 years ago took a wrong turn into efficient market land and through it a lot of statistics and issues about volatility and things of that nature. When you go back and you look at investing as buying a piece of a company and buying it when you think it is at a cheap price, then how much the stock bounced around over the last six months really ends up being sort of a silly thing to look at rather than thinking about it as owning a piece of company.
When you actually look at what you are doing, which is buying a piece of a company, not a security, not a share of stock, but you are actually buying a piece of a company, all the statistics and all the theory and everything else that business schools teach end up making no sense whatsoever.

Bill Mann: This has become a very nice advertisement for Columbia Business School, right? (Laughs.) One of the stories that I really enjoyed from the book was on your first day of class. The other thing that you did was you had someone just name a company and you had the business section of the paper in your hand and discussed the prices, how they varied within a one-year period.

Joel Greenblatt: Right. What I do is at the beginning of a semester, I call out to my students, "Just name a company." They will pick GM or GE or Foot Locker or something -- Abercrombie and Fitch, for instance. So if you pick something like Abercrombie and Fitch, I will open up the newspaper and I will look at the 52-week high and low. So the 52 -week high let's say is 74 . The 52 -week low is 43 . The company is pretty much
unchanged during the course of the year, if the stock has fluctuated between 43 and 74 . If you go over the last two years, it is even a wider range. The stock has been between 23 and 74 even though this company hasn't changed very much in the last couple of years. How is that possible? Has the value of this company changed so much during that time? How do you explain that? Does this make any sense? My students spend a lot of time coming up with explanations as to why this makes sense and actually there are whole fields of academic study to explain why this makes sense.

So I ask the question I ask my students, Why do you think the stock can be $\$ 23$ one day and $\$ 74$ several months later? Does this make any sense? My conclusion is I don't know why it happens and I tell them I don't care why it happens.

Bill Mann: I thank my lucky stars that it does happen.
Joel Greenblatt: Right, it does happen. All I have to know is that even though the price is bouncing around a lot, it is unlikely that the value of the company is bouncing around nearly as much. So what the Magic Formula is trying to do is pick out those companies that are unreasonably low priced at the times when they are low priced. We are doing that automatically systematically by picking companies that have certain characteristics. They are cheap and they are still good businesses.

Bill Mann: Yeah, and again I think that that is really the core element of sound investing is looking at those two, is looking at those two things. Graham said it and Buffett said it and now you are saying it.

Joel Greenblatt: Well, I like to follow in good footsteps.
Bill Mann: The book is called The Little Book That Beats the Market and it is available now, is that correct?
Joel Greenblatt: It is.

Bill Mann: OK, well fantastic. We wish you the best of luck and thank you so much for spending time with us here at The Motley Fool.

Joel Greenblatt: Bill, thanks so much for everything.
Bill Mann: Take care, Joel.
Bill Mann owns shares of Hennessy Advisors.

Another Semester

## Greenblatt Class \# 1

Jan 18, 2005

This weekend outsiders must email Joel Greenblatt about auditing class.
Summary: What Joel does for a living: buying something for less. Opportunity in value investing. Why don't smart people do better? Why value investing works. Problems with valuation techniques.

What is the social utility of passive investing? None that Joel can see. It is similar to being good at picking horses at the track. Joel is good at handicapping to make money.

What does he do for a living? Buy 4 packs of gum for 25 cents and sell one back each for 25 cents. He sells 3 packs a day. 15 weeks x 36 for 6 years or ( $(4 \times \$ 0.25)-\$ 0.25) \times 5 \times 36 \times 6=\$ 810.00$. He pays $\$ 1.25 \times 216=$ \$270.

All he does: He finds out what businesses are worth \& buy them for less. This is the power of knowing the value of a business.

Look at stocks: EBay from $\$ 64$ to $\$ 118$. GM from $\$ 29$ to $\$ 55$. AAPL from $\$ 20$ to $\$ 70$. Krispy Kreme $\$ 50$ to \$5.


Name any company: Why such a (wide) range if the market is efficient? Intrinsic values change slowly, but prices change rapidly and widely. Note the discrepancy.

Observe that prices move around a lot and values move slower. Who knows and who cares? This presents me with an opportunity if I can value businesses correctly. The price at $\$ 35$ or $\$ 55$--both can't be right.

Beating the market is not easy.

- Value companies
- Wait for the right price

1. People can't control their emotions.
2. People don't do the valuation work.

Thus prices move around more than value.

- Mr. Market is crazy
- Have a margin of safety


But there is no translation into action for many investors including smart MBAs.
Gotham Capital has compounded capital at 40\% per year. He just does the obvious.
Why has he outperformed if: 1.) he can't value better? 2.) He is no smarter than others?
Because of the way he looks at the world and his ability to wait for good risk/reward opportunities.
Simplify things. If your valuation is good--that is the key. If he can't value, then he walks away. If he can't figure it out, he walks away. Swing at fat pitches. If it is hard, then pass.

Greenblatt will invest in technology like when those companies had tons of cash and he could buy the business for free.

A good book: Stocks for the Long Run by Jeremy Siegel

Why don't smart people from Columbia Business School and Wharton do better? They get confused - They put value investing in the context of efficient markets.
In one year you have a $2 / 3$ chance of losing $8 \%$ or gaining $28 \%$ if you hold for less than 1 year.
In 1996 Richard Pzena under performed the market and lost clients, yet he was doing what he always was doing.

3 to 5 years is his minimum time horizon. This is the most inefficient part of the market.
In 1999 value was dead. For 4.5 years, there was underperformance. Oakmark fired their manager and brought in a new guy who kept doing the same thing and now is doing great.

Value investing doesn't always work, because if it did, then it wouldn't work. (This contradiction makes investing very difficult because of the persistence, patience and discipline required).

Look at special situation investing - uncovered areas, a different way of looking at the world. Keep the context.

How he sees the world. Now he owns three stocks - concentrated. He is not leveraged. He believes that the market will eventually get it right. The market can often present extreme values.

Special situations - Time frame involved, not sophisticated. Bigger pick. Buy a company for 4.5 x EBIT, the business will do OK.

Also, the way we conduct our portfolio. How we view risk is different than the norm.

This course is about what I know. Basics of finance and accounting. This is the course I wish I had while in business school. Find things worth a dollar and pay 50 cents for it-Ben Graham's philosophy.

The press is depressed because something bad happened, people are worried about it. What will it earn two or three years from now? Most focus on the short term problems versus the long term return.

When the smoke clears, what will it be worth?

Ben Graham: Buy for 50 cents a crummy business, but now the $\$ 1$ is worth 75 cents. The danger with buying "cigar butts" is that time is the enemy of the bad business.

Value your businesses and assume it will pay you. Estimate of growth, but don't know way.
Concentrated portfolio. Gotham returned all outside capital and stayed small. Money Managers focus on next quarter.

There are different ways to value business. Triangulate or cross-check your work.

- DCF Analysis.
- Relative Acquisition Value.
- Break-up value (real estate).

Acquire value - discount brokerage has 100,000 clients but worth more to another brokerage firm that has 500,000 clients. Consolidation of clients means that a strategic buyer can pay more.

## Flaws with Each Valuation Method

1. Intrinsic valuation - Discounted Cash Flow (DCF) has flaws, small changes in inputs lead to huge swings in valuation. Use when the business is very stable and you should be very conservative (in your assumptions of growth and discount rate).
2. Relative value - P/E similar, but other public companies are overvalued. Most acquisitions fail. Pay only $1 / 2$ of $250 x$ earnings. Not comparable - industry consolidating.
3. Break-up value. One division is earning $\$ 3$ per share while the other loses $\$ 1$ per share. So $\$ 2$ per share and if the stock is at $\$ 33$, then it trades at 17 times EPS. $11 \times$ EPS if - ( $\$ 1.00$ close down our loss division) has flaws.

So we use several valuation methods to cross check. Use conservative assumptions.

Use a long-term bond yield. $\$ 1 / E P S$ at 16.66 xs vs. $6 \%$ long bond. Compare a growing dollar vs. a certain dollar. 6\% from govt. bond, but if $\$ 1$ grows then good. If the current long bond (Feb. 2005) is 4\%, use $6 \%$ at least as a minimum hurdle rate or discount rate. Have a margin of safety.
$\$ 20$----\$1 EPS but the bond yields 6\% while the stock yields 5\%, but if it can grow, then better.
\$10 ----\$1 EPS now but normalized earnings show \$0.50. Do you rather own a risk- less bond or this? Is it going to grow or not?

A complicated capital structure: buy 1/2 cash value and a good business.
Value Investors' Club (VIC). 1/2 are professionals. The rest are sophisticated professionals in finance. There are good write-ups. Why cheap?

Some turnover because each member must contribute 2 ideas a year, but less than 6 .
Review the application for VIC.

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S.CN Sherritt
STM.V
JEF
CAH
HIF-U
Groupe Bull
Olympia GA $4.13
MSO
BUL.FP
```

Next week: Income Statement, Cash flow and Valuation Work.
Use EBIT not P/E ratio in your valuation work.
Read Chapters 12-13 \& 17 from Hooke's Book. There are some areas in that book where I disagree.
Duff \& Phelps case study- \$52

## END

## Greenblatt Class \#2

Jan 26, 2005
Joel will not be having a Feb. $9^{\text {th }}$ class. Make up on Friday?
Next Class we will have Richard Pzena presenting his idea of FRE. Prepare FREddie Mac (FRE - NYSE)
Summary: Balance sheet analysis. Good business and good price. Duff \& Phelps Case Study. ROE vs. ROC.
Today we will look at Balance Sheets, Income Statements, CFs as an investor.

| Terms | Abbreviations |
| :---: | :---: |
| Net Working Capital | NWC or (CA - CL) |
| Fixed Assets | FA |
| Current Liabilities | CL |
| Current Assets | CA |

## I. CASH

We said last week that DCF is theoretically the way to look at things, but it is difficult to estimate the cash collected over a long period of time. The problem is figuring that out. Using DCF is like using the Hubbell Telescope, one small change and you are looking at another galaxy.
Exception for using DCF.

1. Answer: A crummy retailer with negative cash flow but great real estate. The property is worth more than the DCFs of the retailing operations. Hidden Asset that can be eventually but uncertainly turned into cash flows. Future wealth creation
2. Another example: two discount brokers: 1 has 200,000 customers and (2) another broker that has $1,000,000$ customers buys it. After the acquisition Broker 2 has 1.2 mm customers with same cost structure. Broker 1 is worth more to an acquirer who can drive operational improvement--mostly cost reduction. There is more value to a strategic buyer.

In general, DCF is theoretically the normal way to value businesses. If that is the case, then why bother looking at the balance sheet?

1. More cash on the balance sheet than is necessary. The excess cash is $\$ 5$. How to value and deal with the cash? CF from cash (interest earned) an investor must separate from the operating business. Forget the interest income line.
2. How will management deploy cash? The $\$ 5$ is not in your (the investor's) pocket. What are management's investment opportunities? What is the history of the management in deploying cash? Cash is easy to see on the balance sheet, but that is not the end of your analysis. The $\$ 5$ is not in your pocket so what you have to determine, based on the history of management, the history of the company, the opportunities in their space, what is going to happen to that cash? If the stock looks cheap, one of the things management could do with the cash is buy-back stock and accrete value to the remaining shareholders. That would be a good use of cash assuming the stock was undervalued. The company could go on an acquisition binge, and you may or may not like that since $75 \%$ of takeovers end in failure, you might think that cash will be dissipated. You have to determine what will happen to the excess cash.

Though you see the cash--mathematically it is \$5-- on the balance sheet, you need to determine what that cash is worth to me, the investor. If I think they can grow their business with that cash like buy an add-on type of business or if they are buying back stock, I may give the cash full value. Or the company may sit on the cash and only earn $1 \%$ or $2 \%$ a year, so I discount the cash on the balance sheet. Generally, I look at that $\$ 5$ on the balance sheet. And how much is it worth to me. I may value it as low as $\$ 1$ or $\$ 2$ or at full value.

Don't just take the $\mathbf{\$ 5}$ at face value. If it were all mathematically simple, the opportunities wouldn't be as great.

There is another flaw when you use Enterprise Value. EV = Mkt.Cap. Plus Net Debt. $\$ 6$ debt $+\$ 5$ cash $=\$ 1$ EV. Say a company has 1 share priced at $\$ 7$ per share or a $\$ 7 \mathrm{Mkt}$. Cap. $\$ 5$ in cash so $\mathrm{EV}=\$ 7 \mathrm{mkt}$. cap - \$5 in cash = \$2 in EV.

You estimate that EV will be worth $\$ 3$ or $50 \%$ higher (at $\$ 2$ a conservative $50 \%$ discount to $\$ 3$ ). So you can lay out $\$ 2$ in EV and have something at \$3 in value. What is wrong with that analysis? You can't immediately unlock the value of the excess cash.

Back to example: EV is $\$ 2$ and you value it at $\$ 3$, however if you value the cash at par you are putting a big weight on the $\$ 5$ in cash. You are laying out $\$ 5$ now for a future return and you may have to wait 2 or 3 years. So $\$ 5+\$ 2=\$ 7$-------going to $\$ 3+\$ 5=\$ 8$. The $\$ 5$ could be dead money so there is less upside. Note opportunity costs.

You can wait round for 2 or 3 years for Mr. Market to revalue the business. But here don't be fooled--you pay $\$ 7$ for a return of $\$ 8$ after two years--your return is not that high--less than $7 \%$ compounded. ( $6.93 \%$ to be exact).

## USE Enterprise Value (EV) ANALYSIS

Should we use P/E or EV/EBIT analysis? In this class we will always use EV/EBIT analysis because in my 20 years in the business--if you don't make the best of your business, someone will come in and do it for you.

So in one sense in the book I assigned you (Security Analysis by Hooke), the author says that you don't have control over the capital structure of the company, so P/E analysis is fine. The Company has the debt it has and you should just leave it at that.

I disagree and think you should always use Enterprise Value (EV) analysis not market cap and Earnings per Share (EPS) analysis. Use EBIT or (Ebitda - maint. Capex).

In general, I think the Private Market Value (PMV) is the best. Figure out what the whole business is worth to somebody then pay a big discount for it.

## II. Accounts Receivable - liquid in a year.

## Inventories

## Refer to Chapter 8 of Thorton O'Glove's Book, Quality of Earnings.

Concerns: credit quality and collectivity. Work in Process (WIP) vs. Finished Goods. Look at them as risks. If you sell on credit, you can sell more stuff.

Inventories - salability

| Commodore Int'l | $\mathbf{9 / 3 0 / 8 4}$ | \% Chg. | $\mathbf{9 / 3 0 / 8 3}$ | \% Chg. | 9/30/82 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Net Sales (3 months) | $\$ 244.2$ | 16.7 | $\$ 209.3$ | 102.6 | $\$ 103.3$ |
| Accts. Rec., Net | $\$ 254.7$ | 34.1 | 189.9 | 5.5 | 180.0 |
| Inventories | 437.4 | 9.7 | 398.7 | 22.0 | 326.8 |

Good, inventories only up $22 \%$ and $\mathrm{A} / \mathrm{R}$ up only $5.5 \%$ in $82-83$ while sales are up $103 \%$. Customers are paying quickly or in cash for a hot product.

However, in 84-83, A/R ballooned $34 \%$ while sales only up $16.7 \%$--note divergence. Inventories only up $9.7 \%$. A/R up because of slow payers or easier credit terms. Or because of a sales slow down. You look for a dichotomy between these two things--sales and A/R.

| Commodore Int'l | Sep 30, 1984 | Sep 30, 1984 |
| :--- | :---: | :---: |
| Inventories | $\$ 243.2$ | $\$ 270.3$ |
| Raw Materials and W.I.P. | $\$ 194.2$ | $\$ 128.4$ |
| Finished Goods | Note big jump in finished goods! | Old goods not selling! |
|  |  |  |

Not expecting as many sales since finished goods piling up in the warehouse. Now 1984/1983 receivables are ballooning 2 x as much as sales. This Company subsequently blew up.
Ask if receivables and inventories growth is in line with sales growth. Look for Aberrations and divergences.

Determine if inventories are good--should I give the A/R and Inventory a haircut?
Could be an industry in distress. Future sales shoved into inventory. Work in Process Inventory (W.I.P.) up $50 \%$ while finished goods are up $10 \%$ - big boom in sales. Check the divergence out.

Are inventories and receivables in line with sales growth? Know what inventories are made up of.
Keep the big picture in mind.

## III. Goodwill

Now some general goodwill is not being amortized. \$5 Tangible Assets with \$10 EPV so purchase price of $\$ 10$ in book value has $\$ 5$ in goodwill. Or $\$ 5$ in goodwill (premium paid in acquisition) + tangible assets $\$ 5=$ \$10 book Value.

I originally paid $\$ 10$, but now the value is $\$ 7$, so $\$ 3$ written-off ( $\$ 10-\$ 7$ ). There is a Goodwill impairment of \$3.

| Company 1 : | Current Assets of Fixed Assets of Goodwill of -Current Liabilities \$ | $\begin{aligned} & \$ 3 \\ & \$ 2 \\ & \$ 5 \\ & \$ 1 \end{aligned}$ |
| :---: | :---: | :---: |
|  | Book Value $=\$$ | \$9 |
| Company 2: | Current Assets of Fixed Assets of Goodwill of -Current Liabilities \$ | \$3 <br> \$7 (more fixed assets means more replacement cost during inflation) <br> \$0 <br> \$1 |

$$
\text { Book Value }=\$ 9
$$

Both companies earn $\$ 2$ per share in cash. With company 1, you don't have to replace tangible assets so you would prefer the business with goodwill. Less tangible assets means more investment to replace those assets in order to keep the business running as is. I (investor) paid a premium over the tangible assets of \$5 because of the high Earnings Power Value of the business. Once I have paid that premium, I own the business and the greater returns will allow me to grow with less investment in fixed assets. I don't have to keep paying the premium over tangible net assets. (WEB explained this in his 1989 annual report).

Current Assets - Current Liabilities $=$ Working Capital $\quad(C A-C L=W C)$.
Capital employed: NWC + FA. So Company 1: WC = \$2 + FA = $2---\$ 4$ in capital. ROIC = $\$ 2 / \$ 4=50 \%$. $\$ 2$ in cash earnings pre-tax/total investment capital = \$2/\$4 = 50\%.

For every $\$ 1$ invested, the business earns 50 cents. This
business doesn't need a lot of Fixed Assets to grow. You
would have to buy less FA to grow than Company 2.
(Less capex reinvested).

Company 2: WC = 2 + FA = \$7 ----\$9 in capital. ROIC = $\$ 2 / \$ 9=22 \%$. For every $\$ 1$ invested, it earns 22 cents.

There is goodwill on the balance sheet because before, someone paid less than me. Asset heavy.
Accounting records what you or someone else paid in the past.
Always look at pre-tax return. EBIT: Earnings before Interest \& Tax or Operating Income. EBIT allows an apples-to-apples comparison between companies because firms have different tax and interest rates. How much the business is earning regardless of the tax rate or interest paid or owed. How much is the business earning?

How much is the business earning to make an acquisition? How much of a dollar of sales drop to operating earnings--the bottom-line.

EBIT/(Net Working Capital) + Net Fixed Assets or EBIT/investment capital.
EBIT is your pre-tax return/what capital that had to be employed to generate that EBIT.
CA ------A/R - CL --------A/P (FREe loan). Assume no excess cash or take out the excess cash and add back after your analysis. You have to finance these receivables minus the money that is lent to you FREely through A/P.

On the denominator we take the Net Working Capital--what you need to run your business plus you need to finance your fixed assets or your plant and equipment. Forget goodwill and everything else.

What you need to generate EBIT is in your NWC plus Fixed Assets ------ Return on Invested Capital (ROIC or ROC). EBIT / (NWC + FA) or operating income/invested capital.

## Which is the Better Business?

## GUM STORE

Jason opens a gum store for $\$ 400,000$ which includes WC + Inventories + FA and building-out the store. Every year he makes EBIT of $\$ 200,000$. He makes $\$ 200,000 / \$ 400,000=50 \%$ Return on capital (ROC).

## JUST BROCCOLI

Now he has a friend named Jimbo who opens a store, Just Broccoli, and he made \$10,000 for each store he opens. $\$ 10,000 / \$ 400,000=2.5 \%$ ROC.

Who would you give money to expand? Give \$\$ to Jason because of higher ROC.
You want to ask how much it costs to expand and how much will you make on the investment?
Be in a business earning high ROC. Borrow $10 \%$ to make 50\%---that is a good deal.
Look at pretax rate to simplify. Compare pretax return to pretax return.
Jimbo is really throwing money away earning a $2.5 \%$ ROC vs. a $6 \%$ risk FREe rate from govt. bonds. He is not earning $2.5 \%$ but losing $3.5 \%$ (6\% Risk FREe Rate - 2.5\% return earned from his store). Opportunity Costs.

## Your goal as an investor: you want businesses that are earning high returns on capital and returns above your cost of capital.

Using capital regardless of how fixed assets are financed. How good a business is this (not measuring equity)? If I put in \$, how much do I earn on it?

Denominator is NWC + FA--why using net and not gross working capital? On average that is the right thing to do. Because in general what happens to your fixed assets, you buy something and you depreciate the assets so the value of your asset goes down, but to maintain your asset, there has to be on-going capex. Depreciation and Capex cancel out (assume Deprec $=$ Maint. Capex). If capex is more than depreciation, then FA will increase accordingly and you will be updated. If you are in expansion mode, you build new stores and the FA balloon before you earn on those assets, so your ROC will decline--so you must normalize or adjust for that. Fixed Assets minus depreciation plus Maint. Capex is why I use a Net number.

So NFA + NWC is what I look at. A quick and dirty analysis. We only buy a few situations. We may have to look at 50 to 100 situations to buy 1 or 2 . Drop or evaluate to study further. Do intensive research on a few things. Gotham Partners are very selective in our investments.

Explain the big picture. Your predecessors (MBAs) failed over a long period of time. It has nothing to do about their ability to do a spread sheet. It has more to do with the big picture. I focus on the big picture. Think of the logic, not just the formula.

Thorton O'Glove was recently interviewed and he wrote the book, Earnings Quality. I looked at the footnotes but they are not the big picture. Don't lose the perspective of the big picture. Listen, I lost the big picture. Savvy guys say the footnotes are important, but think of whether it is a good business and am I getting it at a good price.

## DUFF \& PHELPS Example

The problem with EBIT/ASSETS $=\$ 28.4 / \$ 44.2=64 \%$. What is wrong with that? Take out goodwill of $\$ 21.7$ million. EBIT/Tangible Assets $=126 \%$. Fantastic returns!

EBIT/(NWC + FA) or (tangible assets - current liabilities). CL or Non Interest Bearing Current Liabilities (NIBCL)

This is a great business because it is asset light but with huge returns to capital. The business needs little capital to grow. It drowns in cash.

Student: after-tax EBIT/EV is 6.5\% or about the LT Bond Rate. Hold.

EBIT/Assets $=28.4 / 44.2=64 \%$. Take out Goodwill of about $1 / 2$ the assets.

## Joel:

Over $100 \%$ return on tangible capital. This happens to be a great business with huge ROC.

## What to Focus on:

1. First I am looking for good businesses. EBIT/(NWC + FA) or EBIT/Tangible Assets. This is what the business is earning pre-tax or pre interest cost or benefit.
2. Then a bargain price: EBIT/EV or my earnings yield. This is what I am paying for those pre-tax earnings. $\$ 100$ paid but earning $\$ 9$, so the yield is $9 \%$.
3. Is the earnings stream growing, declining or staying the same? How confident am I of this? I focus on normalizing earnings two to three years out instead of all the little problems in the near-term. Project my EBIT two years out--will it be at risk, will it be growing or shrinking? Hard stuff. Project my EBIT two or three years out. This is where your circle of competence is important.
4. How much am I paying relative to my normalized earnings? If the $9 \%$ yield is growing quickly--it could be a good buy. If it is a business with high ROIC then good. Am I getting a good price? How much am I paying? Am I getting a good return?
5. If I am unable to normalize earnings, then pass on the opportunity or set aside.

The hard part is determining the normalized number and what is happening to that number. Regression to the mean.

If I can figure the normalized EBIT three years out, how confident am I of that? Is this a good franchise or not. What is my ROC? How confident can I be of the future? This depends on the Barriers to Entry, competitive advantages and management, etc.

Then how much will I be paying for that?
I look at things in that simple way. Most of the time I can't project normalized earnings. But when I can, then I have confidence in the business. The space is growing, their new stores will be earning a lot. The business has a franchise.

## Simplify

Just Learn to first ask:

| Good Business? | Is this a good price? |
| :--- | :--- |
| EBIT/NWC + FA (or TA - CL) | EBIT/EV |
| Pre-tax oper. inc./Inv. Cap. | Pre-tax oper. inc./Enterprise Value |
| Is this a good business with normalized earnings <br> and future normalized earnings? | Am I getting a bargain price? |

Only invest where and when you have confidence. You don't have that luxury. If you have a choice, then wait for the perfect pitch. If a business or a normalized return produces less than $20 \%$ pre-tax, the investment must have more going for it than that.

When interest rates are below 6\% (like today 4.5\%) I use 6\% because when Interest rates are less than $2 \%$, you get crazy multiples. Using $6 \%$ or above is an added margin of safety.

Student: Mgt. is getting too much money. Greenblatt: this is a brains business, so you might need mgt. He likes to have management incentivized with shares.

So the company is earning $\$ 2$ per share, but you feel normalized earnings three years out will be $\$ 5$ per share. Usually what happens is that when you grow sales, you have to grow NWC and FA during that time. Don't fine tune it. I am trying to choose between the Broccoli Store with $2.5 \%$ ROC and the Gum Store with 50\% ROC. The choice should be obvious.

Sales growth
Every dollar at Duff \& Phelps of FCF can go to buying back shares. EBIT growth of 51\% in 1998. Jump in sales growth due to structured finance.

The business is a semi-oligopoly. Firms need to have bonds rated by an agency like Duff \& Phelps, S\&P or Moody's.

- This is a good business
- Use of cash to buy back stock.
- Because of share buy backs, then Net Income grew at $18 \%$ while EPS grew faster at $29 \%$.
- Sales growth of $13 \%$ to $25 \%$


## In 5 years, what would Duff \& Phelps look like?

1. 28.4 EBIT grows at $24 \%$ per year because it is a good business and has a niche with Barriers to Entry (B-t-E) and Competitive Advantages (CAs).

Duff \& Phelps is using all their earnings to repurchase stock. Assets are not growing despite sales growth of $20 \%-25 \%$. It only has tangible assets of $23 \mathrm{~mm}-$-only growing by $\$ 2$ million over five years despite sales doubling. Then looked at EBIT growth. 51\% growth in 1998 due to increase in the structured finance area. Their business could grow without increases in assets. There is good increase in sales and FCF without adding investment.

All in all, this business looks good. Every nickel used to buy back stock, so a good use of cash--EPS growing faster than earnings.

What would this business look like in five years?

## Greenblatt makes three assumptions for three scenarios:

If we don't have confidence in our estimates, this is a waste of time. EBIT grows faster than sales. EPS grew at $30 \%$ per year and sales grew at $20 \%$ per year.

1. grow $8 \%$ : EBIT of $\$ 28.4---\$ 41.2+\$ 2$ million $=\$ 43.2 \times 8$ multiple $=\$ 341 / 3.45 \mathrm{~mm}$ OS $=\$ 99$ per share.
2. grow $13 \% \$ 52.3+\$ 2=\$ 54.3 \times 13=\$ 32.58$ after-tax $=\$ 122$ per share .
3. grow $20 \%=28 \%$ annualized return over five years $=\$ 164$ per share .

What about cash earned over 5 years? I will assume that I will add the cash to the balance sheet. But in this case, I assume for every $\$ 1$ there is a buy back of stock. Assume price is up $8 \%$ per year. All their earnings used for share repurchase. 347,000 shares per year bought back--so reduce at the end of five years by 1.5 mm shares. $5 \mathrm{~mm}-1.5 \mathrm{~mm}$ FD outstanding shares $=3.5 \mathrm{~mm}$ outstanding shares. Prof. Greenblatt noticed the declines in outstanding shares because of continuous share buybacks.

Place a Margin of Safety in your assumptions by being conservative. At most, an investor will lose cost of carry if the business doesn't grow.

Simplicity of exercise. In footnotes - put $\$ 2$ million back. Mgt. owned 25\% of company so management is a big stakeholder. A good sign of management alignment with investors.
7.8\% after-tax yield for a 13 P/E vs. $6 \%$ bond.

Barriers to Entry with huge ROIC. He learned from this to invest in Moody's. He invested in Moody's at 20 x EPS for a 5\% yield which was less than $6 \%$ bond yield.

Learn an industry. Because of studying Duff \& Phelps, he knew to look at MCO when it was being spun off.
$13 \%$ growth in five years $=\$ 122$. It turned out that $24 \%$ growth a year was conservative .

## Assessing Management:

The trick is that if a CEO is being paid $\$ 500,000$ a year, then $1 / 2$ million point for every $\$ 1$ up. Where is their bread buttered? Prof. Greenblatt wants mgt. to be large stakeholders relative to their salary. To fight or change management, there is not a lot you can do except by a proxy fight.

Mgt. of Duff \& Phelps spent \$4.5 mm buying back stock in 1996, \$13.9 mm in 1997 and \$16.7 in 1998. Net Income of \$9 mm in 1996, \$10.7 mm in 1997 and \$16.7 in 1998.

## KEY TO LEARN:

| Step 1: Good Business? | Step 2: $\quad$ Bargain Price? |
| :--- | :---: |
| EBIT/(NWC + FA) | EBIT/EV or |
| Operating Income/Net Tangible Investment | Enterprise Value/Operating Income |

Can you normalize EBIT or not? $6 \%$ (US Long term bond yield) is the bogie to beat. $16.66 \times \mathrm{P} / \mathrm{E}$ vs. $6 \%$ US bond yield. 10 x EBIT is my initial bogie. Growing or Shrinking?

Gotham Capital invests in a very focused portfolio of 3 to 9 positions.
Have a focused portfolio. Only do things you feel comfortable about or know a lot about.
How to adjust to this framework to new stuff like special situations? How to create opportunities and expand our universe? $6 \%$ is equivalent to: $\$ 16.66 / \$ 1.00$

The point of the Duff \& Phelps example is the simplicity of the exercise and the different things you need to think about. If you looked at the footnotes, you see they would stop paying $\$ 2$ million a year. What are they doing--buying back stock. Mgt. owned $25 \%$ of the company so they were stakeholders. The business had a franchise. There were barriers to entry.
$7.8 \%$ after-tax yield (8 P/E) or 6\% bond? I would rather own Duff \& Phelps Rarely will you find a business this good in your travels. In fact, the only other business I found was Moody's when it was spun off when it was selling 20 x earnings or yielding $5 \%$. Their earnings were temporarily depressed.

I saw this opportunity because of my prior study of this industry. Ultimately, Fitch took over Duff \& Phelps at $\$ 100$. In one year we got $\$ 100$. The gap between price and value closed quickly. All knowledge in this business is cumulative.

End of lecture.
Hand-Out www.sherlockinvesting.com

## Return on Equity or Return on Capital: Which is the better guide to performance? John Price.

Two brothers, Abe and Zac, both inherited \$10,0000 and each decided to start a photocopy business. After one year, Apple, the company started by Abe, had an after-tax profit of $\$ 4,000$. The profit from Zebra, Zac's company, was only $\$ 3,000$. Who was the better manager? For simplicity, suppose that at the end of the year, the equity in the companies had not changed. This means that the ROE for Apple was $40 \%$ while for Zebra it was $30 \%$. Clearly Abe did better? Or did he?

There is a little more to the story. When they started their companies, Abe took out a long-term loan of $\$ 10,000$ and Zac took out a similar loan for $\$ 2,000$. Since capital is defined as equity plus long-term debt, the capital for the two companies is calculated as $\$ 20,000$ and $\$ 12,000$. Calculating the return on capital for Apple and Zebra gives $20 \%(=\$, 4000 / \$ 20,000)$ for the first company and $25 \%(=\$ 3,000 / \$ 12,000)$ for the second company.

So for this measure of management, Zac did better than Abe. Who would you invest with?
Perhaps neither. But suppose that the same benefactor who left money to Abe and Zac, also left you $\$ 100$ with the stipulation that you had to invest in the company belonging to one or other of the brothers. Who would it be?

Most analysts, once they have finished talking about earnings per share, move to return on equity. For public companies, it is usually stated along the lines that equity is what is left on the balance sheet after all the liabilities have been taken care of. As a shareholder, equity represents your money and so it makes good sense to know how well management is doing with it. To know this, the argument goes, look at return on equity.

Let's have a look at your $\$ 100$. If you loan it to $A b e$, then his capital is now $\$ 20,100$. He now has $\$ 20,100$ to use for his business. Assuming that he can continue to get the same return, he will make $20 \%$ on your $\$ 100$. On the other hand, if you loan it to Zac , he will make $\mathbf{2 5 \%}$ on your money. From his perspective, Zac is the better manager since he can generate $\mathbf{2 5 \%}$ on each extra dollar whereas $A b e$ can only generate $\mathbf{2 0 \%}$. $25 \%$ return vs. $20 \%$ on total capital employed.

The bottom line is that both ratios are important and tell you slightly different things. One way to think about them is that ROE indicates how well a company is doing with the money it has now, whereas ROC indicates how well it will do with further capital. (In a later article, I will explain in more detail how to use ROC to estimate the growth of earnings.)

But, just as you had to choose between investing with Abe or Zac, if I had to choose between knowing ROE or ROC, I would choose the later. As I said, it gives you a better idea of what a company can achieve with its profits and how fast its earnings are likely to grow. Of course, if LT debt is small, then there is little difference between the two ratios.

Warren Buffett is well known for achieving an average annual return of almost $30 \%$ over the past 45 years. Books and articles about him all say that he places great reliance on ROE. In fact, I have never seen anyone mention that he uses ROC. Nevertheless, a scrutiny of The Essays of Warren Buffett and Buffett's Letters to Shareholders in the annual reports of his company, Berkshire Hathaway, convinces me that he relies primarily
on ROC. For example, in one annual report he wrote, "To evaluate (economic performance), we must know how much total capital--debt and equity--was needed to produce these earnings." When he mentions ROE, generally it is with the proviso that debt is minimal.

If your data source does not give you return on capital for a company, then it is easy enough to calculate it from ROE. The two basic ways that LT debt is expressed are as LT debt to equity (DTE) and as LT debt to capital DTC. (DTC is also referred to as the capitalization ratio.) In the first case, ROC is calculated from ROE by ROC = ROE/(1 + DTE), and in the second case by ROC = ROE $\mathbf{x}(\mathbf{1}-\mathbf{D T C})$.

For example, in the case of $A b e$ we saw DTE $=\$ 10,000 / \$ 10,000=1$ and ROE $=40 \%$ so that, according to the first formula, ROC $=40 \% /(1+1)=20 \%$. Similarly, $\mathrm{DTC}=\$ 10,000 / 20,000=0.5$ so that by the second formula, $\mathrm{ROC}=40 \% \times(1-0.5)=20 \%$. You might like to check your understanding of this by repeating the calculations with the results for Zac's company.

If you compare ROE vis-a-vis ROC for a company like General Motors with that of a company like Gillette, you will see one of the reasons why Buffett includes the latter company in his portfolio and not the former.

## END

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## Greenblatt Class \#3 Richard Pzena Presentation

Next Friday (Feb. 11, 2005) 9:30 AM in classroom 329.
Summary: Richard Pzena's Presentation on Freddie Mac (FRE). Why Value Investing works. Regression to the mean.

Joel Greenblatt Introduction: Richard Pzena is the smartest guy on Wall Street that I know and probably the smartest guy I know.

Don't let that discourage you. You don't have to brilliant to be successful. Most of us are intelligent but not brilliant. You can be average and do very well. And without further undue......

Richard Pzena: We will talk about Freddie Mac (FRE). I forgot what the annual report of FRE looked like-and I think this is one of the reasons why value investing works (Rich Pzena holds up the annual report of FRE which is 400 pages long), because you have to read this kind of stuff and you have to try to make sense of it. And it scares most people when they read about the problems of Freddie Mac.

## Why Value Investing Works

Some of the evidence for why does this style of investing work. I try to use real examples of the kind of things that people are forced to invest in to be true value investors. And maybe it will give you a sense of the human nature and the behavioral psychology that creates value opportunities. And why they will continue forever.

The data is fairly compelling. There have been many academic studies over the course of time trying to find the best things that work in the stock market. What works on Wall Street is a book that tests every available metric. Value metrics, whether they are low price to CF, BV or sales or low EV/EBIT, tend to be a good predictor of future performance. That seems silly as you can get because you would think these opportunities are arbitraged away.

If I were going to look from the 1960's (45 years) to 2004. The $S \& P 500$ performed $11.5 \%$ a year. If you took some simple metric of valuation--lowest price to book value quintile--and bought the cheapest quintile. You would make about $17 \%$ or $5.5 \%$ out-performance per year for 45 years or 8 times as better.

How can that be? There are a couple of explanations: The tendency of people investing in markets is to act like human beings. Well, what does that mean? Typically, this is how they forecast: they simply extrapolate trends. Good businesses continue to do well; bad businesses continue to do poorly; and stability stays stable. People forecast by looking at the past (driving while looking through the rear-view mirror-Warren Buffett). People use that history to extrapolate into the future.

But the actual behavior of companies especially at extremes does not look anything like that. The actual behavior is regression to the mean. Note decline of high ROE companies and rise of low ROE Companies.


If you use any profitability metric like ROIC, Margins or ROE, you would find that the best companies start in the top quintile (based on profitability), and I will track their profitability over the course of time. What would I find......I would find a slow deterioration to the mean. People assume that the profitability will continue so they price these companies at very high price to book so they might be priced at 5 x book value but earning on average $30 \%$ ROE while the lowest quintile might be priced at 1 times book value with a ROE of $2 \%$. Many people would say well these companies with the $30 \%$ ROEs are just better. So paying 5 x times book for $30 \%$. I get ( $30 \% / 5$ ) or $6 \%$ vs. $(2 \% / 1) 2 \%$ return so those companies ( $30 \%$ ROE companies are better.

The data we use does not have a survivorship bias so it includes the companies that go bankrupt. What percentage of the lowest quintile companies go bankrupt? Only 1 percent.

| A Solid Statistic over time | 1 year | 5 year | 10 year | 20 year |
| :--- | :---: | :---: | :---: | :---: |
| 17\% vs. 11.5\% out-performance | $65 \%$ <br> probability | $85 \%$ | $95 \%$ | $100 \%$ |

That is looking back over time. Obviously that doesn't guarantee what the future will be, but it doesn't seem to change with time. With every generation there seems to be a Nifty Fifty, the Internet Bubble. There is something that gives rise to unbelievable valuation spreads, despite the lessons of history for 100s of years. Why?

Have you read books from the New Era? One book said that the historical rules of supply demand had been repealed. The greater the supply, the higher the value. The greater the supply, the lower the price but the higher the value. Those were the books that people were reading and believing. You look back on that and say what were they thinking?

Today we have gone almost back to the other extreme. Today people are looking at commodity businesses that are clearly bad businesses with decades of history of lousy returns on investment. The only thing today that counts is physical possession of steel, oil or lumber.

You have better odds in the value camp, because you are playing in a better field. So if I was mediocre, I would beat the market.

| Value Investor: | $\left.\longrightarrow \begin{array}{l}\text { Add Value: } \\ \begin{array}{l}\text { Invest in fifth quintile: } \\ \text { Low price/Book or P/E }\end{array} \\ \\ \hline\end{array}\right]$Low value due to permanent or temporary <br> problem? Determine the difference. |
| :--- | :--- |

But to be great one must distinguish--what this tells you (lowest quintile) is that those companies are experiencing problems; some are experiencing temporary problems. The way you can add value is to distinguish between temporary and permanent problems. You can avoid the bankruptcy issue by avoiding the companies with debt.
But some of the $17 \%$ return comes from taking that bankruptcy risk. How many managers can claim for 40 years to have returned $17 \%$ ? You would have 8 times as much money returning $17 \%$ vs. $11.5 \%$ after 40 years.

## Analyzing Cyclical Stocks

Student: How to value cyclical stocks? Housing Stocks have low price books with high ROE's. Is that the best of both worlds?

Pzena: I would believe that those housing stocks have no chance of maintaining that profitability. That would scare me. If you bought into the home builder story--all the mom and pops are out of businesses and the industry is consolidating--those earnings will be sustainable. One possible explanation.

Any problem with highly cyclical companies with a profit margin swing--you get booms and busts in demand-let's use steel--the price goes from $\$ 200$ a ton to $\$ 600$ ton and now you hear it is a "new" world. China had huge demand, there will be shortages of material. It ignores 1000 years of human behavior. You build a lot of steel plants. You can't ignore the supply side issue. What sets the price is the amount of supply (and the number of plants built). When supply comes on, it comes on in huge amounts. There is a sudden shift in supply.

The electricity market had a supply problem: Calpine had huge (high) ROEs, power plants will never be built due to environmental issues. So Calpine gets valued at 2 times the replacement costs of a power plant. So they have $\$ 1$ billion in power plants but they are valued at 2 times. So what should Calpine's business strategy be? In one year they added $20 \%$ to supply. It is rare to find a sustained commodity peak because the supply side-the increase in supply in response to high prices. The law of supply \& demand is immutable.

Home builders have a history of poor returns on equity and now all of a sudden they are having spectacular returns on equity.

Last week I visited a home-builder. What I heard was in 2004 they built 37,000 homes and their plan for 2006 is to build 60,000 homes. They acquired all the land and infrastructure. When you ask, what about a downturn? Their response is that you do not have to worry about a downturn because the little guy will suffer. When you ask the regional guy what he will do, he says that you cut the prices quickly and move the inventory. Don't worry we will take it out on the contractors.

The whole purpose of price cycles is to change behavior. The market can't absorb the new supply. It is not just them, but all their competitors who replicate the same strategy. It will happen (the cycle turns) but I don't know when it will happen--next year or the following year, but it will happen.

I am not saying that the peak can't go on for awhile, but you are playing with fire in that kind of investment. This is momentum investing. I am going to ride this bubble and get out before the market turns. I can show you statistical evidence that momentum investing works. There is a serial correlation between what happens today vs. what happens tomorrow. If today's earnings are good, then there is an $80 \%$ chance that tomorrow's earnings will be good.

When the market turns, it turns violently. The people playing momentum are spending every day on the phone with the homebuilders asking how many people looked at homes.

While I do believe value and momentum investing are sensible strategies--I have a lot of trouble understanding growth investing.

If I randomly buy the highest growth stocks, I will lose. The higher the growth rate, the lower the returns-why? Because everyone sees the same thing. In fact, if I did the same graph as before substituting growth rate for returns, I would get exactly the opposite--the higher the growth rate, the lower the returns. Why?

Everyone sees the same thing, so they pay a high price. But what are the odds of such growth continuing? If you were to study companies with a billion dollars of market cap, about 1200 of them, what percentage of those companies have sustained $15 \%$ growth rate for ten years based on historical analysis--less than five (5) percent. It is really, really hard to have growth rates of $\mathbf{1 5 \%}$ for ten (10) years.

People, when they do growth stock investing, are comparing $\mathrm{P} / \mathrm{E}$ to growth rates as if those growth rates would continue forever, as if the growth rate will never change. So when you try to understand the valuation of Cisco, the reality is that Cisco stopped growing as fast as the market hoped. They (investors) had to believe to put a 500 billion valuation on a company that was earning $\$ 1$ billion. They had to believe that $\$ 1$ billion will grow a lot. Yet, the odds are so heavily stacked against you in that kind of a bet, it doesn't seem reasonable to try to make that bet. That's the fundamental underpinning.

Let us actually take a look at companies trading at low price to book.
Student: In the homebuilder's example, why did you go out there to visit them? Did you go there to think about shorting stock?

Pzena: I went there for educational purposes because I want to be ready buy when the collapse comes. I conclude that the collapse will be very spectacular. Historically, these companies have sold below their book value when they have collapsed. The argument today by the homebuilders is that their book values are understated because the value of the land has gone up.

I have no doubt that that is true, but also, there are at least 10 other publicly traded companies which are wellfinanced bidding property values sky-high. They are doing it using options, but they are giving a lot of the economics away to the land-owners. They will do fine as long as they are bailed out by rising prices.

They do all their economics assuming no price rise and they only do projects with a $20 \%$ rate of return. Pzena asked the Company, "How would you have done over time using that metric?" If we were not bailed out by rising prices, we would not have made it on a single development. I believe it because $20 \%$ is a ridiculous(ly high) return. The reason they don't make their numbers is because developing properties is difficult and they don't happen on the time schedule they expect. So when housing prices are rising, they have windfall profits.

Student: When would you buy the homebuilders?
Pzena: I would buy the homebuilders when their ROEs are below normal--not when they are above normal. If you read in the newspapers that Pulte has an inventory of unsold homes or where margins have collapsed. The bad news is public. (Lower prices have already discounted bad news).

## SEARCH CRITERIA

I look for three things:

1. Low valuation
2. The business is good so it should earn a decent return on invested capital
3. The current earnings are below normal.

When you are playing around with earnings above normal--and obviously you have to make some judgment about what "normal" earnings are--even the Pulte's (homebuilders) of the world say their margins are above normal. This is not a normal environment for housing prices. So I would wait for the opposite, then you win not only from valuation but a positive change in earnings. It is much better to be riding a positive wave in earnings vs. a negative wave in earnings even if the valuation is cheap.

## Housing Economics

Student: How would you look at the unit economics of the housing cycle?

Pzena: I would look for some signs that ordering rates are slowing. Look for cancellations and slowing development. What happens if interest rates rise and people cancel? Everyone will cancel, so now the homebuilders have unsold inventory--what do they do? Discount the price rapidly. You can monitor these things on an on-going basis.

Screens: Low price to book.
What do we have on low price to book stocks?
Student: A lot of us had Von Mueffling's class and his criteria are high ROE stocks and low price to book value or low P/E. What are your comments for that strategy?
Pzena: I would qualify it (Von Mueffling's strategy) and say that the current ROE is not the correct or "normalized" ROE. If I can buy low P/E and high normalized ROE, that combination is good. I would want to do that too. When you do current high ROE as a metric, you will tend to pick everything at a cyclical peak. The earnings are above trend so the P/E is low and has a high ROE. You will be buying every commodity or manufacturer (like today) at its cyclical peak. Be careful of blind screens.

You would have to believe that those earnings are not sustainable, so you will not use those earnings in the current P/E ratio.

We don't invest in things where we can't figure it out like the fashion industry, for example like Reebok. We call up the company and the issue was that they did not have the right fashion in the stores, so next year they will. And they did, but we couldn't figure it out.

I don't invest using price to book. I am just telling you that it works. OK. It is a nice simple thing to use. I use price to normalized earnings. I want some downside protection in case I am wrong in my analysis. That may not be assets, it may be the company's franchise or base of business. I am not wedded to P/B methodology. We miss many potential opportunities.

Student: How do you define "normalized" earnings?
Pzena: I define normal as what should the business earn given the industry structure, given the competitive strengths and weaknesses, given the management--it is a judgment but is highly a function of history. History is usually a good guide of what the business is capable of earning--especially if you take a long history.

I would look at five years of history of ROEs and if it looks good, or if I looked at the company/business and it is in an incredibly competitive business/industry, and I think they got lucky for five years. This is why I think it was luck and not returns based on the structure of the industry.

I know UNUM PROVIDENT (UNM). The company offers individual and group disability insurance. It is a notoriously bad business. Because their selection of customers tends towards adverse claims. The company is stuck with tons of adverse policies. If you start reading about $U N U M$, you would say I have no idea what the book value really is, so I am going to pass.

Let's go --Time Warner has lots of goodwill on the books--they haven't written off $A O L$ yet. As soon as they do, then I will look.

We happen to be in a period where there is not a lot of controversy in the world. Normally, you would find every airline stock as a low price/book portfolio. Then you look at that, so you walk away because of all the bad stuff they read about the companies and industry. They are too risky, Jetblue is killing them. And yet they should do well (the bad news is already priced in). Buy airline stocks, for example, today.

In fact, I always joke is that the most common question I get from my clients is: "Don't you read the papers? How could you buy FRE? The CEO of $F R E$ is a crook. Let's stop for ten minutes and return at 2:30.

## Freddie Mac (FRE)

You can buy good business at low prices. First we need to define what a good business is:

- High profitability: high ROIC, ROE, ROA, margins--FRE has high ROE. We tend to use current equity because it is a regulatory constraint and a growth constraint. Over history FRE has had a high ROE.
- Barriers to Entry--FRE has a government charter, a quasi-govt. status that allows them to access to credit markets that others don't have.
- Pricing Power--FRE has a cost advantage due to its access of lower cost credit.
- Growth Opportunity--FRE is holding and insuring a portfolio of mortgages. Their business is tied to the debt outstanding. The trends are very strong--60\% to $70 \%$ home ownership with a booming mortgage market. Credit has been available and lower interest costs have driven demand. The demographics are favorable for growth. What is their addressable market: total mortgage debt outstanding. Forecast growth in mortgage debt outstanding.
- Favorable Industry Structure--FRE is one of two participants

Now we say our objective is--we see all of the above--in general, we seek a low price, low current profitability and a good business. Are those all mutually exclusive? Not really. A good business to me could be having some sort of temporary problems. If you can find that combination, you can make a lot of money. That is what we seek. That is it. It is pretty simple to say.

## Now let us talk about Freddie Mac. First, why is this a good business?

The trends are strong--looking at the last 10 years the rate of homeownership has gone up to $60 \%$, almost $70 \%$ so you have had a booming mortgage market historically, you also have had--you could say that trend has peaked. Because why has that happened? Because interest rates are low, because credit is available. It is cheaper to buy a home than it is to rent an apartment. Let us stay with the concept of demographics. What is their addressable market? Basically, mortgage debt outstanding--total mortgage debt outstanding.

How would you forecast growth in mortgage debt outstanding for the next ten (10) years?
Household formation is growing: 1-1.5\%
Price of housing: the median price of a house has never declined: 4\%
Home ownership rates: 1\%
Convert credit card debt to $2^{\text {nd }}$ mortgage debt: $1.5 \%$. Total 7.5\%
If you ask Fannie Mae (FNM) or FRE about this--they would say 7.5\%. I think it will be less than that. Is that good? Yes, it is better than the 5\% nominal economic growth of the economy.

What do you think the growth rate of the S\&P 500 has been over nominal GDP? It is actually a little slower than GDP, because the big companies grow less fast than smaller companies. Over time, the S\&P 500 trails nominal GDP by $1 \%$.

I would rather have the money now than in the future. If it is cheap and I can get the money now, then great. If you don't have to pay for the growth--I love that.

What are the negatives for $F R E$ ? A big risk: $F R E$ is under the whim of the govt. to pull their charter. The structural risks in the financial markets. On the other side people will say that the govt. won't mess with this.
The US is the only country in the world with a 30 -year fixed rate mortgage market where you can borrow $80 \%$ of the value of your house. Look at the history of this country pre-FNM and FRE, the mortgage terms were you could put $40 \%$ down and borrow for 6 years. A very big difference. The counter to this is that people will say other financial institutions will pick up the slack. The banks will step in with a steep yield curve.

## Management

Let us talk about management. No one mentioned management in the criteria for a good business. Based on the metrics, we would say $F R E$ and $F N M$ are well managed because they make high returns on equity. Wouldn't you conclude that management is doing a good job?

Is this a well-managed business? What do you think? Old management worked had to keep their advantages. Basically, we agree that $F R E$ has a great franchise if it can keep its franchise. FRE has most of the characteristics of a great business. It is assumed you would want to own this business if it was at a cheap enough price.

## Valuation

How would you go about valuing $F R E$ ? This is not an easy one to do by the way. Especially given the accounting issues in this company. How would one determine the normal, sustainable earnings power value of FRE?

What sort of cash is the company generating? Let us start with what they do.
They buy mortgages and sell them of into the market. They are buying a pool of mortgages that were originated by someone else (no origination like Countrywide Credit--15\% of all mortgages in origination by Countrywide Credit--which would require an unbelievable amount of capital if they did not package them and sell them to institutions like FRE and FNM). FRE's biggest business: buying mortgages.

They engage in credit protection. They buy mortgages and sell bonds to fund those mortgage purchases.
REVENUES: The interest rate on those mortgages and the fees they receive. How do you fund that mortgage? $F R E$ buys mortgages and they issue debt to pay for those mortgages--they make a spread. If there was no prepayment option on the debt and no penalty--how do you fund that and not absorb any risk? They issue callable debt.

The mortgage is $6 \%$ and $F R E$ issues $5 \%$ callable debt for a spread of $1 \%$. If the mortgage holder pays me early, FRE calls in its debt, if the mortgage holders does not prepay, then FRE continues to hold the debt to maturity. FRE has exactly matched its interest rate risk.

Foreign govts. will buy bonds from FNM and FRE, which allows the Government Sponsored Entities (GSEs) a lower cost of capital. You must simulate the callable debt and you must model the behavior of the mortgage market. The competition for FRE and FRM is coming from the big commercial banks (Citi, Bank of America). Those banks take risk by playing the yield curve. The spreads are wide enough (yield curve is steep enough) to take on duration risk.

FNM and FRE take duration risk and mismatch on the extreme tails. They hedge $98 \%$ of an interest rate move. The cost of a perfect hedge would make this a mediocre business.

Foreign govts. Buy FRE and FNM paper because they receive a higher interest rate and there is the belief that the US govt. will stand behind this paper in the case of default by FRE and FNM.

Limit how much of your portfolio you put into FRE--so you diversify.

## Find out:

The normal profitability of their mortgage business? The normal profitability of their credit risk business? Take in an insurance premium and pay out a loss.

Normalize earnings: normalize the interest rate spread. Think about the businesses that takes credit risk and their other business, which insures credit risk. The credit risk business is very profitable because it requires little capital.

There is nothing that can't be screwed up so that is why you have to have some diversification. FNM's worst loss was 6 bps. The worse credit losses in their history were 11 bps. Now they are at 1 bps . You can make some assumptions about what are the normal credit losses. Typically, they have low risks.
The incentive for someone to bail on his or her mortgage is very low--so credit risk is low. They require 20\% equity down. The dispersion of mortgages is wide. I can come with some normal credit risk and normal credit losses and I can do the same with their credit insurance business.

They make net about $8 \%$ bps on their credit business.

## Now let's get to earnings? $\operatorname{FRE}$ can make up any number they want under GAAP.

First of all GAAP rules doesn't apply here because they don't make sense. In essence, for $G A A P$, you mark to market the asset side of the balance sheet but not the liability side (mismatch). These companies try to smooth their earnings.

Bad management is doing sleazy things to get their options exercised or their bonuses-to enrich themselves. The most generous way to describe it is that they are trying to meet their capital requirements and they can meet their shareholder's needs for stability by exploiting the accounting rules to get hedge accounting for as much of their balance sheet. Hedge accounting says that if you can link your assets directly to a liability then you can mark both to market since you have a perfect hedge.

My contention is that no matter what they choose, you shouldn't believe it. GAAP doesn't work in this kind of business.

The biggest source of opportunity for us these past few years since 2000 or since Enron is fear of accounting. The reality is--you shouldn't count on it.

They actually put out their mark to market balance sheet or what they call their fair market balance sheet (they estimate their assets and liabilities marked to market--giving you the net asset value) so you can know what is going on with these companies. See page 76 in 10-K.

Why you should trust these companies fair value estimates because these assets and liabilities are short-term, liquid and they trade freely in the market. You can see exactly what they make. On average they make $20 \%$ per year on a fair value basis over time. It is less volatile than reported through GAAP.

OK, so now I know what the fair value of their portfolio is, I know what their returns are. If you were evaluating a leveraged hedge fund, you would judge the fund by its returns. You wouldn't ask to see GAAP financials.

Management had all these tools to manipulate earnings. But it is nothing compared to the value of this franchise. There is a risk that this business franchise (the charter) may be withdrawn. So how do you evaluate that risk? Take the liquidating value to the business today if the charter was withdrawn.

Fair value is $\$ 25$ billion and on 680 million shares: $\$ 37$ per share (equity value leveraged 50 to 1 ) fair value of their mortgage portfolio and it earns $20 \%$ a year. So I get $\$ 7.40$ EPS for their mortgage portfolio.

Then we have their guarantee business, which earns about $\$ 1.3$ billion a year-- $\$ 1.97$ per share.
So total is $\$ 7.40+\$ 1.97$ or $\$ 9.37$ per share. The stock is at $\$ 65$. Now we can question every part of this. We can say it won't earn $20 \%$ per year, the spreads won't really stay where they are because of bank competition.

Worst case analysis: The govt. forces them to liquidate their portfolio. The process of liquidation would be assumed gradually over a 15 year period. It is not in anybody's interest to have a forced liquidation.

Take the present value of that cash flow stream. The value would be greater than $\$ 37$ per share (theoretically the $\$ 37$ would be the value if liquidated today) because they have embedded above market discount rate
returns in this investment. So we do this arithmetic and their share goes from $15 \%$ of the mortgage market to 0 gradually over 15 years to come up with the value.

Take the current earnings and take the present value over 15 years so it is roughly $\$ 44$ per share (the PV of liquidating the mortgage portfolio--running it off over time because it is earning above the discount rate). This is roughly $\$ 2$ per share of earnings (credit risk business) or 10 times earnings.

Total liquidating value: $\$ 44+\$ 20=\$ 64$ per share. Today the stock is $\$ 65$. The worse case is the same valuation as today. In the case that everything bad happens, it would be the same valuation as today. Prior to today, the stock traded down to $\$ 46$ per share but it had roughly the same value. In a normal value it should earn $\$ 9$ per share--15x earnings--or $\$ 140$ per share. If it got over $\$ 100$ I might sell it. The excess capital is embedded in the earnings.

FRE doesn't know what their financials are. FNM is a year and a half behind. You are investing in a company that is not producing any statements.
$20 \%$ is change in fair value year-to-year. They can leverage their portfolio more than anyone else.
Student: your mortgage analysis?
Pzena: We looked at what the yields were and what the cost of various callable debt was. What should FRE have earned on their portfolio.

We are big shareholders of commercial banks. Capital spending is just turning now. Banks make more money in that environment.

In a normal yield curve, the arithmetic doesn't work for the banks. Banks would much rather make industrial loans than invest in mortgages.

When FRE went up to the 70's then you saw some downside risk because of the price being up. We bought FRE 18 months ago when it was in the 50's.

Student: What stock screens do you use?
Pzena: Our screens are extrapolating reported earnings. Screens are relying on GAAP earnings. The stock price collapsed compared to reported earnings.

I had done work on FRE 10 years ago, because I wanted to understand how they make so much money. I concluded that they did not put on a perfect hedge-which was why they made so much money. Plus their competitive advantage. I did a model of their mortgage business. We looked at FRE for a couple of months.

FRE isn't going anywhere tomorrow. This (bad press, accounting scandal and congressional concerns) will be in the paper for awhile.

The political will to disrupt the mortgage market doesn't exist. FRE and FNM have huge support in Congress. Homeownership is part of the American Dream. Tinkering with change will occur.

Student: What type of time horizons do you use?
Pzena: Financial statements being reported is no. 1, a clearing of the regulatory environment is no. 2. Normally we look at a 3 to 5 year time horizon. Don't forget that these numbers are growing all the time. It isn't static. You get to participate in the growth in all of this. This year the range is $\$ 60$ to $\$ 140$ while next year it will be $\$ 70$ and $\$ 150$. They still are making good returns on their portfolio.

We use Compustat Database and we have our own model that looks at 10 years of historical data. It screens things for us. Are prices selling at a low price to what history suggests the company should own? Then you
can go in and do the work to see if the problems and fears are temporary. We do five year forward earnings. And we cap the growth at $15 \%$ per year.


Student: Which true barriers to entry do you focus on?

Pzena: Can this company earn a return in excess of its cost of capital? Location, competitive cost position, a dominant market position, it could be a brand or a franchise, or an industry structure's. Boeing (BA) has only one competitor--a good industry structure. Computer Associates (CA) was controversial due to accounting issues, but customers were captive--they couldn't switch. CA provides system tools for commercial processes. Customers can't afford to shut down their businesses to switch to other competitors. If IBM came in and offered their software for free, would you switch? Customers said. I run a 24/7 data center--this is not strategically important! We view CA as Con Ed-a utility.

CA under $\$ 10$. It was yielding $\$ 2.75$ per share in free cash flow, and it was at $\$ 8.00$. Whirlpool and Maytag.
Tenet (THC): Management came into our office to close $1 / 3$ of our hospitals that were losing money. The market rallied on that news which I found unbelievable. We were counting on those hospitals to make money and justify the earnings power value.

## END

## Summary: Spin-off examples: Sears, Paramount, Host-Marriot. How Joel places information into context.

Special situations have been around for awhile. This book was written in 1966 and the first edition was 1958. The book describes turnarounds, mergers, recaps, tenders, spin-offs.

Someone asked me after reading my book, You Can Be a Stock Market Genius, if it is harder to make money now since these techniques are better known? The answer really is no. There are so many hedge funds out there and so much money out there chasing opportunities. I find that pretty amazing. I do think, during the last six months to a year, the stock market has gone higher; many more things are full-priced. This isn't a
particularly plentiful market to find bargains, but then again I don't have to go back very far-to the Spring of 2003 or the Fall of 2002 and there were incredible bargains all over the place. You have to go back to 1999 when insanity reigned and there were huge opportunities on the long and short side in the short term. The market goes crazy sometimes on the downside and on the upside. Wait for opportunity.

What opportunities might be out there today? I was looking at the paper this morning and I saw an announcement on Sara Lee-they will spin off some assets. I get a couple of these reports that follows spinoffs (The Spin-Off Calendar).

## Sara Lee

Here is a hand-out on Sara Lee-basically they make food and apparel. It is a huge company with tons of different brands. What caught my eye when I read this: The branded apparel segment of the business for instance, generated a single digit operating margin and an $11 \%$ return on assets in 2004, while the beverage and household products divisions produced margins and returns on assets of about $16 \%$ and $20 \%$ or more.

This could be a crappy business but cheap. It could do better on the 11\%--not static.

So $20 \%$ ROA in the household products division, they are selling some, they are spinning some off. That could be a good business. So we went through that analysis where we are looking for high EBIT/tangible assets.

Student: It could be cheap and spun-off.
Joel: I learned from the school of hard knocks to buy better businesses. I understand why that 20\% ROA is interesting, but why would the $11 \%$ be interesting? So maybe the performance could get better-the $11 \%$ is not static. The $11 \%$ could improve.

The spin-off does better than the parent-usually if the spin-off is the smaller company. I would look at both, they could both be opportunities. Basically, there is a conglomerate discount-you are forced to buy $40 \%$ of some business you don't want. When things split up, you have that going for you. One of the things they said in the papers today is that they will sell off some divisions. They will spin off some divisions I don't know what that $11 \%$ really means. There could be some high ROA in that branded apparel category. $11 \%$ could represent an average. There could be some $3 \%$ and $20 \%$ businesses in the branded apparel business. Someone smart in new management they begin to get rid of bad performing business. Sell or liquidate.

## HP Potential Spin-off

At first brush, it doesn't look that attractive at least compared to the other one. There are opportunities in both companies. To the question does this still go on? This is a big company. We have in yesterday's Wall Street Journal: They oust Carla. There was a big dispute on the HP-Compaq merger. A combination with a low and a high return business. The original Founder fought the merger. He fought Carla Fiorina. We have one good business-a printer business which supplies ink to the printers (a high return on capital business) -and you want to combine it with a crummy business-computers. Carla doubled down on the crummy business and she would make cuts and improve operations and that kind of failed. Speculation is that they will split up the business. There is potential here for another spin-off here. You have a good business with high market share-the printer business and the computer business. You have a huge market cap company in disarray. There is a lot of uncertainty here, thus there could be opportunity.

Student: When would you start working on this situation?
Joel: Now, I look for more low hanging fruit or when the special situation is further along in the process, but there is a lot of money to be made now. If I were your age, I would start working now and tear apart the company now and develop a first guess as to the combined company would be worth on a conservative basis. Sometimes you can do it and sometimes you can't. They haven't put it into play. This is very early stage.

Sara Lee: This will take a year and a half and cost savings will come over 5 years. That tells me these guys are very slow.

Richard Pzena put out that chart. Things revert to the mean. You just don't sit there and take it-things stink. You shut down a factory, you close a division, and you cut costs. The natural thing is to make choices. Sometimes when I own a company and if it is very cheap, I hope it gets worse because I want these guys gone. If things get any worse, these guys won't have a choice-management will have to be fired. Have a margin of safety to suffer through the short term decline. That is one of the benefits of having a long-term time horizon. If you are a money manager, and you are looking to make money in the next 6 to 12 months, that is tough to live through. But if I am getting a big discount and I am looking out three years, I can sit through the near term. They (Board of Directors: BOD) can't live through this. I want some special situation to happen: Where they decide to close down the poor performing division, they replace management.

Carla (Fiorina) was wrong and the three years are up. These (Special Situations) are always percolating. There are always companies in trouble or things not going particularly well. Special Situations like mergers empire building, strategic acquisitions. Empire building then restructuring and spin offs.

I am trying to give you an idea of how I look at these things. Hey, the $20 \%$ ROE business is interesting and hey, the $11 \%$ ROE business is interesting-breakout the brands-there could be a huge disparity here. The question is when do I start looking at these? If I looked at Sara Lee at $\$ 23$ and thought it could be worth \$36, I would start looking now. How do I figure that out? If I thought Sara Lee was worth \$27, I wouldn't play now. If there isn't enough of a margin of safety there, I probably wouldn't play there now. All the numbers are guest-imates or estimates. If someone says this is a growth story, I am more skeptical. On the other hand if someone says they are going to cut these costs. I discount cost cutting strategies as well. Carla cut costs but the business got worse.

I gave you the spin off calendar for January.
This is an extraordinary event for a company like this. This is the kind of thing they (analysts who follow the company on a regular basis) are just not good at. They will suspend a rating or they will suspend until things are clear.

AXP-AEFA Spin-off: Financial Advisory business for middle income Americans. Not many companies grow $12-15 \%$ for long periods of time. AXP is a great business. Economies of Scale (EOS) work very well. A tough business to break into. I looked at these 10 years ago when they spun off Lehman Brothers. The good business was the financial advisor business which was growing at $20 \%$ per year and they messed it up. Now they are the poor relative.

The next line says $12 \%-15 \%$ growth sounds interesting. It is the high end of its equity return targets which is $28 \%$ to $30 \%$--that is a pretty darned good business.

Financial Advisor's (AEFA) ROE is $11 \%--$ not great for a stand alone company-perhaps it is being mismanaged.

Any opportunities here? They are screwing something up since they should have a very good business here. It is out of favor, but it should have done better. It shouldn't be a low ROE business. When I was looking at the last one. I thought it was a good business. I think that having them sell $A M E X$ products and having those types of conflicts hurt them. I met with Harvey Golub 10 years ago. We had a discussion. He claimed the markets were efficient. The price was $\$ 40$ but we thought it was worth $\$ 60$. But he was telling me the market was efficient. A disconnect.

There was a disconnect here. People say we can't beat the market, so what would it lead you to do-it would lead you to not hire the best people because all people are fungible. I will not pay for the best guy. The culture might have been dysfunctional. A terrible attitude to have.

AEFA turned into an allocation business, but selling low quality funds comes back to bite you. There is room for improvement here. Also, there should be different parts of the business, so I would look and see which parts are doing well and which aren't doing well.

Your assignment for Wed is to analyze this spin-off of Amex. Tell me where you think the potential value and opportunities are. (IACI Spin-off)

That was interesting. Part of the business is lending money or running up the balance sheet. You are lending to people at $8 \%$ and borrowing at $2 \%$. Cost of Capital is $2 \%$ and lending at $8 \%$ but you borrow it. Huge asset size on a small equity. Low ROA but high ROE is the way banks work because of high leverage.

This particular business where you have a high ROE because of sales or critical mass. They make money on the margin. Break-out the businesses: What is in the finance business (ROE) and then what they are getting in the TRS business? One part of the business could be getting $15 \%$ and the other $35 \%$. I did a quick and dirty on what the two divisions earn-I read an analyst report. The "good" TRS could earn $\$ 2.50 — P / E$ of 20 or $\$ 50$ and the "bad business" could earn \$0.56-16 multiple or \$9. He gave a total break-up value of \$59 (\$50 + $\$ 9$ ). Today the stock is at $\$ 55$. At one sense you could say it is not a great opportunity. The time to look at this is now. I see opportunities in both areas.

When I read the paper what do I see? To give you an idea. I don't know if any of this comes out to play. I am giving you some context for your work Wed. Basically my opportunities are 1 ) in the "bad" business, they may be able to earn more on depressed earnings. Yet this isn't a huge driver of value, but $\$ 9$ to $\$ 13$ could be very good but on a $\$ 55$ stock-so not the main driver. It might be worth owning if I do enough work and the company (Financial Advisory business) is worth $\$ 9$ conservatively, so I would be paying $\$ 46$ for the rest of the business. Buy the good business for $\$ 2.50$ in EPS and it is then trading at 18 times P/E. But I might be willing to buy this business now. I don't know if this is how it is going to play out.

If I give a conservative value to American Express Financial Advisors (AFA), and I conclude $\$ 9$ is conservative, so the other business (the parent- $A X P$ ) is $\$ 46$. I don't have to wait because I am buying two things I might want to own. The opportunity of the good business may be in the earnings growth. Believe it or not, being a cheap value investor, the opportunity may be in the P/E side because you are now unleashing an improvement in ROE in the poor business. See how high one business ROE is versus the financing business. It could be sold off. Perhaps I own a $40 \%$ to $50 \%$ ROE business if I strip out the financial part. I don't really know.

A number of years ago, one of my best positions was Moody's. Because I learned about their business through researching Duff \& Phelps, another rating company. The business earned $100 \%$ on capital, didn't require any capital spending to grow and it could return capital to shareholders. This was a great business worth 30 x EPS. ROIC - g = excess ROIC.

One of the better businesses was Coke. Let's compare what Buffett paid for Coke vs. what we could pay for Moody's. Moody's was actually a better business because Coke had to reinvest $20 \%$ of their earnings back into their business to grow and Moody's did not. You could get the same growth for no reinvestment. Moody's dollar was worth more per $\$ 1$ than Coke’s dollar (80 cents left over after reinvestment). Moody’s you got to keep the full dollar. This is an example for why I might pay a high multiple for a business if you can get a high return on capital. If this is truly growing $12 \%$ to $15 \%$ per year, I could project 2 or 3 years what the company could be earning if I believed that story and put a multiple on it.

Never use less than 6\% for an opportunity cost for capital. 20 P/E is a 5\% yield vs. 6\% minimum (10 year bond yield). This can compete (5\%) vs. (6\%) if it can grow over many years. AXP could be yielding 5.5\% to $6 \%$ while growing $12 \%$ to $15 \%$. I want to see how much capital needs to go into that business to grow. What ROIC is there after I strip out the financial business. AXP gave that guidance- $12 \%$ to $15 \%$ earnings growth.

I am just telling you the formulation of a thesis after reading this one article and getting one report to see the break down of the businesses. Now I need to check it out and see if the numbers work and add up and not just taking the numbers they gave me. How I break down the numbers to see how they got there. What's a good business, what is a bad business? That is a lot to figure out in 40 seconds.

## It worked that way last time. What we are trying to do in this class is practice and get as much experience as possible. That is why I want you to read the Value Investors Club (VIC) site. Read as much as possible, and you will learn faster. Study.

Assignment Wed. is to come back with some of your answer. What makes sense (for AXP Spin-off?)
I think the opportunity might lie with AGFA in the earnings. And I think here if they can grow $15 \%$ then there could be multiple expansion ( $20 \mathrm{P} / \mathrm{E}$ to $30 \mathrm{P} / \mathrm{E}$ ). Big investors might think MCU at $30 \mathrm{P} / \mathrm{E}$ is a good deal.

I have never found a better business than Moody's. I think AXP is potentially a great business. 28\% to 30\% ROIC is good, but I don't know how good-50\% ROE business?

Student: How do you think about the multiple? - 6\% is a 16.66 multiple or $1 / 16$. I think of pre-tax returns. $\$ 100$ stock and earning $\$ 6$ per share or $6 \%(\$ 6 / \$ 100)$. How long and how much will earnings grow? How good a franchise is it or what is the rate and duration of earnings?

## Being a Value Investor

The beautiful thing about being a value investor is:

1. Most businesses I can’t figure it out, so I skip it. I pick my spots, wait for the fat pitch.
2. If I can value the business, I will only do it if I have enough room. I think the stock is worth $\$ 10$ and I can buy it at $\$ 5$ to $\$ 6$. It will be worth $\$ 10$ in two years. So if I am wrong, I kind of break even. Thus, many opportunities are screened out.

I don't measure risk by volatility but by if I can lose money. How confident am I that if ten things go wrong, can I still make money? Like flipping a coin where if I flip heads, I make $\$ 5$ and if I flip tails, I lose nothing.

Page 1: The Spin-off Calendar. These are companies with stakes in other publicly trade equities.

## SEARS CASE STUDY

Pages 102-108 of the book, How You Can Be a Stock Market Genius:
In Sept. 1992 Sears announced its intention to sell a 20-percent stake in two of its subsidiaries to the public. In the case of Dean Witter, Sears also announced its intention to distribute its remaining 80-percent interest directly to shareholders at a later date, some time in 1993.

Sears was selling or distributing business it already owned. By taking Sears stock price and subtracting the market value of its remaining stakes in Dean Witter and Allstate, a value for the rest of Sears assets, primarily the department store, could be calculated.

In the beginning of June, Sears sold a 20\% stake in Allstate for $\$ 27$ per share. By the beginning of July, just before Sears distribution of it s remaining stake in $D W$, this is how things stood: $D W$ 's stock was trading at approximately \$37 per share; Allstate’s stock was trading around \$29; Sears stock stood at about \$54.

Sears announced that it would distribute its remaining 80-percent stake in $D W$. This meant that for every 100 shares of Sears, a distribution of 40 shares of $D W$ would be made. (Sears was distributing 136 million shares outstanding-so the distribution ratio was 136/340 or 0.4.) Therefore, in mid-July, each Sears shareholder would receive shares in $D W$ worth approximately 0.4 (the announced distribution ratio) multiplied by $\$ 37$ (the trading price of $D W$ 's stock), approximately $\$ 15$ worth of $D W$ stock for each share of Sears owned.

Since Sears was trading at $\$ 54$ per share before the distribution, this translated to a net price of $\$ 39$ for the remainder of Sears. What was that remainder? Primarily it was Sears remaining 80 percent stake in Allstate, its foreign and domestic department store business, and various real estate businesses (including Coldwell Banker).

Sears owned approximately 340 million shares of Allstate. Sears, itself, also happened to have approximately 340 million shares outstanding. This meant that if you owned a share of Sears you also indirectly owned a share of Allstate. With Allstate at about $\$ 29$, or about $\$ 10$ per share ( $\$ 39$ net stock price less $\$ 29$ price of Allstate), you were getting the foreign and domestic Sears department-store business and its real-estate business. Was this a bargain?

Michael Price in Barron’s July 5, 1993 laid out the case: "That \$54 a share includes one share of Allstate at $\$ 28$, so hat leaves $\$ 26$ ( $\$ 54-\$ 28$ ). Then you get 0.4 share of $D W$, which is $\$ 15$. That leaves (\$26-\$15) \$11 or $\$ 10$. About $\$ 2$ or $\$ 3$ of that is Sears Mexico and Sears Canada. That leaves about $\$ 8$. Coldwell Banker is worth $\$ 2$ or $\$ 3$ a share. So that leaves $\$ 5$ a share, or a market cap of about $\$ 1.5$ billion of the retailer-with $\$ 27$ billion in sales. The new mgt. seems very focused. It is an almost debt-free retailer with huge real-estate opportunities.

Sears had $\$ 79$ per share in sales. If those sales could be purchased for $\$ 5$ a share (debt free), then that worked out to a purchase price of just over 6 percent of sales ( 5 divided by 79). On the other hand, a look at J. C. Penny (a comparable "crummy" retailer) showed sales of about \$78 per share and a market price of about \$44 per share-that was over $56 \%$ of sales. Of course, there are many other measures of relative value (earnings, for instance), but all indications were that the domestic retail business of Sears could be created at an incredibly cheap price.

## Look for partial spin-off opportunities.

After the $D W$ distribution, the $\$ 39$ remaining investment in Sears was up 50\% over the next several months. Allstate was only up from $\$ 29$ to $\$ 33$ during the period. Obviously, the market finally took notice of the inherent value of Sears other assets.

Yes, it was possible to simultaneously buy Sears stock and short Allstate stock, creating only the portion of Sears that was clearly a bargain. In some cases, this is a smart way to play, especially when the value of the cheap portion-a $\$ 5$ per share department store purchase-is a small part of the purchase price: $\$ 39$, post $D W$ distribution. However, in this case, the disparity between the bargain purchases price of the department store segment and true value was so huge, no such fancy tactics were necessary. (End of book portion).

First announcement of Sears. Sept. 1992 announcement. Sears had two big subsidiaries—Allstate and Dean Witter (DW). They would sell off $20 \%$ to the public and spin off the remaining $80 \%$. Why would they sell $20 \%$ to public rather than to spin-off. One answer is to establish a value? You can't sell off more than $20 \%$ to have a tax-free spin-off.

Why would you sell 20\%? To get the cash! The reason to spin-off stuff is to get money or because it didn't work out or you are not getting the value from the stock market. Something is not going right. That is somewhat a painful thing to do-admit your mistake and spin it off.

First sell $20 \%$ of company to public then spin off the remainder. They would also sell $20 \%$ of Allstate to the public and keep $80 \%$. Sears will not dispose of the remaining $80 \%$ of Allstate-but what they really mean is that they will dispose of that interest. Because there is no other logic to that move. What they are saying is that we will try to hold on to this company. No way is that going to happen.

Sears is a department store, Allstate is an insurance company and Dean Witter is a brokerage, so there is no strategic reason for the combination of these companies.

In those days, Sears was a euphemism for loser. Under pressure they do the spin-off. I assume I will eventually get the value. My horizon is three years. This came out Sept 92, so now we move to April 1993.

They did a public offering of Dean Witter and now they are getting ready to spin off the remainder.
For every share of Sears you own, you get 24 shares of Dean Witter $(D W)$. If $D W$ is at $\$ 35$, you get 0.4 you get $\$ 14$ for every share of Sears that you own. Sears at the time was at $\$ 53$. You could either short $D W$ that
was out there and create the rest of Sears for $\$ 39$ ( $\$ 53$ Sears - $\$ 14 D W$ ). Or you could wait for your distribution and sell it off when you were done. Take the risk that $D W$ moves in the interim.

If you own 1 share of Sears and Sears has 400 million shares outstanding. Sears owned 176 million of $D W$ after the spin-off. If they say we are going to spin off the shares to investors. For every share of Sears, you own 0.4 shares of $D W$. If there are 440 mm shares outstanding and you will get 176 mm shares of $D W$--each 1 share of Sears will get 0.4 of DW. If Sears is trading at $\$ 53$, then $0.4 \times \$ 35=\$ 14$. So what is left of Sears, which includes the retailer and Allstate trades at $\$ 39$.

Next page is when they fess up to the fact that (offering in June) they will sell 78 mm shares of Allstate (Insurance company) in the range of $\$ 24$ to $\$ 27$. Sears will own $82 \%$ of the outstanding common stock. So now Allstate, Sears will sell 78 mm shares at $\$ 24$, that will leave them 303 mm shares. For each share of Allstate will equal the shares of Sears. For each share of Sears you get a share of Allstate.

Announcement June $18^{\text {th }}$. One page 8, Mike Price is interviewed in Barron's—he points out the opportunity. Sears has gone faster than expected in its sales of Allstate and DW.

So $\$ 54$ for Sears which includes 1 share of Allstate so subtract the price of Allstate (\$28) so the remainder is $\$ 26$, then subtract $D W(\$ 15)$ so the remainder is $\$ 11$, then subtract Sears Canada ( $\$ 2$ to $\$ 3$ ) for a remainder of $\$ 8$ to $\$ 9$, then subtract the value of Coldwell Banker (real-estate firm) of $\$ 2$ leaving $\$ 5$ to $\$ 6$ per share of Sears (retail operations). Sears has no debt. $\$ 1.5$ billion market cap for $\$ 22$ billion in sales or $6 \%$ for $\$ 1$ of sales.

Crappy retailers sell for more. J.C. Penny has $\$ 19$ billion in sales with a $\$ 10$ billion market cap- $55 \%$ of sales. Sears is now 9 to 10 times cheaper than J.C. Penny (Relative Value). Sears is a debt-free retailer. The new management seems very focused. In this particular case, Sears had no debt.

## This is when I finally wake-up. 6\% of sales for Sears vs. $55 \%$ of sales for J.C. Penny-almost $1 / 10$ as cheap!

Turn to page 10, I looked at the $S \& P$ tear sheet for J.C. Penny. Look at page 11, J.C. Penny -I categorized as a crummy retailer. I did a quick and dirty. Of course, you would have to compare earnings, but Sears is $1 / 10^{\text {th }}$ the price of J.C. Penny.

Two weeks later, Sears spins off the other two companies. I was left with $\$ 5$ for Sears and worth potentially $\$ 50$. This went from $\$ 5$ to $\$ 30$ in two months or $6 x s$ !

How the heck did that happen? The opportunity was announced for months. Mike Price lays out the opportunity in Barron's for the entire world. How will you make money with Amex, Sara Lee, or HP on the front page on the Wall Street Journal. There is plenty of time for people to find it. How is the opportunity possible?

People said that when I wrote the book, I had ruined it for everybody. The first year after I wrote the book, spin-offs did poorly, but now they have done well. Things don't change. This guy wrote the book about spin offs, mergers and restructuring in 1956. This was a high profile opportunity-Mike Price is a high profile guy in a high profile magazine, Barron's I am telling you that I am not worried about making money doing this stuff. It's messy. Institutions don't want to own it. I don't know why these opportunities exist, and I don't care.

I bought 3Com and shorted Palm. I was able to hold 3Com for a negative 33 dollars. That was really inexplicable. The bottom line this stuff happens. This is a particularly blatant one. There is a lot of money to be made. I tried to help you in the beginning.

If you as a money manager own 30 to 40 , stocks you will not have the time to look at the messy situations. There are plenty of other hedge funds out there, but they are subject to all the same biases. It is that it is complicated or you have to think about it in a slightly different way. I am better at it than I was 20 years ago; I have seen a lot of things and experience is good. It is somewhat hiding in plain sight. It is that it is complicated. Think in a different way.

This stuff is out there and in the last three days there is tons of fodder. There is plenty of time to get in.

## Sara Lee <br> AMEX-AGFA If I think $\$ 9$ for AGFA is conservative, I may be able to play right now. $H P$ (future potential divestiture)

In the Sears example, I shorted the Allstate because, I wanted to own a lot of just Sears.
I am on the extreme scale of concentration. When I see an opportunity this good---buy for $\$ 5$ and have the potential to make $\$ 30$ to $\$ 50$-I load up.

## PARAMOUNT COMMUNICATIONS/VIACOM CASE STUDY

In Sept. 1993, Viacom agreed to purchase Paramount Communications for stock and cash. Viacom, a media conglomerate controlled by Sumner Redstone, was the owner of cable services like MTV, Nickelodeon, and Showtime, cable systems, broadcast stations, and television and production divisions. In what appeared to most analysts to be a good fit with Viacom, a combination with Paramount would contribute a leading producer and distributor of motion picture and television programming, a book publisher (Simon and Schuster), more cable channels, more television stations, and two sports teams. Particularly attractive to Viacom was Paramount's' extensive library of past movie and television hits as well as access to the future output of Paramount's film and television studios.

Viacom was competing in this merger against Barry Diller of Fox Network and QVC Home Shopping service. Viacom, in an effort to strengthen its offer, Viacom merged with Blockbuster Entertainment. That merger was scheduled to close shortly after the successful acquisition of Paramount.

At the time Viacom was able to purchase, for cash, 50.1 percent of Paramount's shares outstanding. Although the contest was over the opportunity to profit from the merger had only begun.

What wasn't so formal was the method of payment for the remaining 49.9 percent of Paramount. While cash was the sole from of payment for purchasing the first half of Paramount’s stock, practically everything except cash, was the form of payment for the second half of the merger-known as the back end of the merger.

The back-end payment for each share of Paramount consisted of:

- Viacom common stock
- Exchangeable subordinated debentures of Viacom
- Securities known as contingent value rights or ("CVR" one for each share of Viacom stock received in the merger),
- Three-year warrants to purchase Viacom common stock at $\$ 60$ per share, and
- Five-year warrants to purchase Viacom common stock at $\$ 70$ per share.

The vast majority of Paramount shareholders were interested in owning the shares of an entertainment conglomerate or the stock of a takeover candidate. While the Viacom common stock might have been of interest to some of these shareholders, the exchangeable debentures, the CVR and the two types of warrants were going to be sold-without looking at the proxy document and without regard to their true value (They sell without economic reason).

The Viacom stock issued to the public as part of the merger consideration would nearly triple the supply of Viacom stock in public hands.

What is all this stuff? It was answered in "Paramount Merger Consideration".
Combining the purchase of one share of Viacom common stock with the purchase of one CVR created a unique investment opportunity. The CVR was a security issued by Viacom to help guarantee the value of the back-end securities that Paramount shareholders were to receive in the merger. It was probably this guarantee of value by Viacom that was responsible for its victory in the bidding war over Paramount.

The CVRs worked this way: If Viacom common stock traded below \$48 one year after the completion of the Paramount merger, Viacom would make up the difference through a payment to holders of the CVRs. (E.g., if Viacom stock traded at $\$ 44$ on the one-year anniversary of the merger's close, Viacom would pay $\$ 4$ for each CVR; if Viacom traded at $\$ 38$ Viacom would pay $\$ 10$ for each CVR.

By purchasing one CVR for each share of Viacom he owned, an investor could ensure that the combined value of the two securities would be at least $\$ 48$ in one year. If Viacom traded higher than $\$ 48$-let's say to $\$ 55-$ then, although the CVR would be worthless, the combined value of the two securities would be $\$ 55$, even better than the guaranteed $\$ 48$ price. Since, shortly after the merger was completed, one CVR and one share of Viacom stock could be purchased for a combined price of $\$ 37$, a guaranteed price of $\$ 48$ in one year looked pretty good-a 30\% annual return with little risk and no upside limitation.

Viacom limited the payout on the CVRs to a maximum of $\$ 12$; even so, Viacom stock could fall to $\$ 25$ before an investor who bought both the CVR and Viacom stock for a combined $\$ 37$ would lose money. For another, Viacom could extend the payment date of the CVR—but only in exchange for a payout larger than $\$ 12$.

I simply read the page in the proxy that told me how they worked. However, I did have an advantage in all this. It pays to check out merger securities!

The five year warrants to buy Viacom stock at $\$ 70$ per share, looked particularly interesting. These warrants gave the holder the right to buy Viacom stock at $\$ 70$ per share for a period of five years. Since Viacom stock was trading at about $\$ 32$ per share in July 1994, the right to buy Viacom stock at $\$ 70$ didn’t look too enticing. On the other hand, with this type of situation, I like to think about the old story of the peasant who is brought before the king and sentenced to death. A lot can happen in a year.

The five year warrants gave the holder the right to buy Viacom stock at any time during the next five years for $\$ 70$. In the case of an ordinary warrant, this could mean that the warrant holder was entitled to receive one share of Viacom common stock in exchange for $\$ 70$ in cash. The $\$ 70$ could be paid in cash—and there was nothing unusual about that. However, the $\$ 70$ could also be paid with $\$ 70$ in face value of one of the other Paramount merger securities. Which merger security? The exchangeable subordinated debentures I mentioned earlier-item \#2 on our list.

Shortly after the Paramount merger was completed, these merger securities were trading at $60 \%$ of their face value. This meant I could buy $\$ 70$ of face value of these securities for only $\$ 42$ ( $60 \%$ of $\$ 70$ ). I would effectively have the right to buy Viacom stock not for $\$ 70$, but only $\$ 42$ worth of merger securities. I would have this right for five years. Viacom was at $\$ 32$. The right to buy stock at $\$ 42$ for five years was a lot more valuable than the right to buy stock at $\$ 70$. If I hadn't read the portion of the proxy covering merger securities, there was no way I could have known this opportunity existed.

Buying both the warrants and debentures was a winning trade.
Remember to read the proxy of merger securities. (end of book section)

## PARAMOUNT - Page 12.

This is the back-story to the example in the book, (You Can Be a Stock Market Genius). The Paramount situation was a hostile battle for control of Paramount back in 1994. What eventually happened was two sides bidding for Paramount and they ran out of money, so they threw out pieces of paper. Different rounds. The winner of Viacom--they would buy half your stock in a tender offer $51 \%$ for cash and then give you all that stuff that they didn't have on the back end. Part of the deal happened in cash, then give you paper on the back end.

It really was one of the most complicated deals ever. They didn't have value to give. The front end was done-Viacom bought 51\% of Paramount for cash—then you had the clean up 3 or 4 months later. This proxy came out in 1994. This was no longer on the front page. Look on page 12-this is what you were getting in the pack end of that deal.
.93065 of a share of a leveraged company (Viacom B Stock). Viacom bought a company bigger than itself. Viacom traded at $\$ 285 / 8$ before this battle it was at $\$ 34$ and change. The stock gets pummeled because they are issuing millions of shares of stock and they overpaid, the winners curse.

Then you get $\mathbf{\$ 1 7 . 5 0}$ of $\mathbf{8 \%}$ subordinated debentures of Viacom. They are exchangeable and subordinated.
There is plenty to trade here.

## .93 for a contingent value right (CVR)

. 53 of a three-year warrant. The difference between a warrant and an option? They work the same way, but with a warrant the money upon exercise goes back to the company. The stock has to double within3 years.

## . 3 of a five-year warrant.

When issued trade: if the event occurs.

CVR: $\$ 48$ \& mkt. price. At $\$ 28$. Not $>\$ 12$. If $\$ 26$--- $\$ 48=\$ 12 . \$ 51$ second date. $\$ 55$ third date.
If you are a mutual fund-you don't want the junk on the back end. There will be selling-so this presents an opportunity. I will describe what a CVR is. It is an interesting security. This is complicated stuff. What is this CVR?

Well if you looked at the table of contents of the proxy-so you go and read what a CVR is. Turn to page 13 or 14. The basic jist is: listen, if our stock is not at $\$ 48$, but at such a time-two years out-we will pay you the difference of the market price and $\$ 48$. But they will not pay you more than a maximum of $\$ 12$. So at $\$ 36$, the CVR will be paid off at $\$ 12$ and if Viacom is at $\$ 40$, then ( $\$ 48-\$ 40$ ) $\$ 8$ will be paid to the CVR holder. CVR guarantees the $\$ 48$ price unless below $\$ 36$.

We can extend the CVR, then it is at $\$ 51$, then next at $\$ 55.00$. Such an amount of $\$ 12$ can be paid at the discretion of Viacom. What does that mean? This means you will get 85 cents to 95 cents on the dollar. Wall Street speak means that they will screw you in the end. A euphemism.

So when you do your margin of safety analysis you need to account for the haircut.
Then again, this presents an opportunity of buying Viacom and if you are bullish on Viacom and this CVR is trading at $\$ 3$, then for $\$ 315 / 8$ you will have some security. Let's say you buy 1.5 CVRs for every share you buy of Viacom, then at $\$ 33$ you have the upside above $\$ 33$ but the downside is covered. This was unique to this deal but every deal has unique aspects.

## What I am trying to get you to do is read the fine print of the deal and know where to look.

So for 1 share of Viacom stock you get 1 CVR and if you are an enterprising investor, maybe there is some ratio I can do here. But at least know what you are getting.

The warrants when they expire--\$70 warrants expire in five years and three year warrants at $\$ 60$. What do you think attracted me to the warrants? Viacom just bought something for debt that was bigger than them? I was thinking more of leverage - you have a company with $\$ 2$ in equity and $\$ 8$ in debt for an EV of $\$ 10$. What would happened if those assets became $\$ 12$ so for a $20 \%$ move in the underlying assets in 3 years, you could get a double in equity value (from $\$ 2$ to $\$ 4$ ) for a move up of $20 \%$ in total assets. I viewed Viacom stock as a LBO. In three years $\$ 28$ could turn into $\$ 60$ because of the leverage. The warrants could be worth something.

Page 16, first paragraph: in the case $\qquad$ .if you exercise all the warrants. $\qquad$

You have to pay $\$ 60$ to get your stock so if your stock is at $\$ 70$, then your warrant is worth $\$ 10$.

To exercise the five year warrants you have the choice of paying $\$ 70$ in cash or you can contribute $\$ 70$ of face amount of the crap they were giving you from the merger-the super subordinated (we don't have to pay you) debenture was trading 60 cents on the dollar. So buying some of these five year warrants and some of this paper, you could use it to purchase Viacom stock at face value. So I could contribute $\$ 70$ face amount of exchange debentures, that gets my exercise price effectively down to $\$ 42$. These are five year warrants now had a strike price of $\$ 42$ (not at $\$ 70$ ). You could turn $\$ 70$ warrants into $\$ 42$. You could make these debentures worth more because combined with the warrants they were worth more than $\$ 70$. It was a way to get you face value relative to the cost of the funds. Those 60 cents on the money debentures looked good.

No. 1 I can tell you want I think. I am just a guy reading this. It is what it is. We created money. It was a way to give money that they (Viacom) didn't have in five years. They did a really stupid thing, they went out to buy Blockbuster (BBI) for stock so there would be more stock and more debentures.

I love this bet and it seemed like a way to own a piece of a LBO. If they issued a lot of stock for Blockbuster they would get a lot of current cash flow but they overpaid.

## You find this by looking at obscure opportunities.

When you see a complicated security there is huge benefit. Because when we looked at Sears which was on the front page of major newspapers, we still made money. But here when you get into esoteric securities, weird stuff and it seems pretty boring, there is opportunity. You completely understand why people miss this. If you do this for yourself, you will never run out of opportunities. Guys that are very good, get big fast and start looking at other opportunities instead of small opportunities.

Smaller cap situations are good. By knowing this kind of stuff, you can really compound your own capital. I don't think these opportunities (smaller cap stuff) will ever go away. People don't know where to look or do the work. The more you see, the more you know what to look for. Instead of shifting through the 400 page proxy, you can hone in on the opportunity.

In addition to looking at American Express, we will look at Warren Buffett (read the Essay's on Warren Buffett). Feel free to bring in ideas. I just found three things in three days which are huge spin-offs. We can analyze them together. I am giving you experience that I have. You won't look at it that way. A lot of it you have to do yourself. I am pushing you along.

Why would I look at this, why wouldn't I?

## MARRIOT-HOST MARRIOT.

Page 43. In the book I thought I was writing for the lay person, but after a year at Columbia, I realized I was writing at the MBA level. So I left out a lot of details. It is a lot more complicated than I made it sound.

## BOOK: Host Marriot/Marriot International

During the 1980s, Marriot Corporation aggressively expanded its empire by building a large number of hotels, but the cream of their business was not in owning hotels but charging management fees for managing hotels owned by others. CFO Bollenbach's idea was to leave all of the unsalable hotel properties and the low-growth concession business-burdened with essentially all of the company's debt in one company, Host Marriot, and spin off the highly desirable management-service business, more or less debt free, into a company to be called Marriot International.

According to the plan, Bollenbach would become the new chief executive of Host Marriot. Further Marriot Intl (the "good" Marriot) would be required to extend to Host Marriot a $\$ 600$ million line of credit to help with any liquidity needs and the Marriot Corporation, would continue to own 25 percent stakes in both Marriot International and Host. The spin-off transaction would be done by the middle of 1993.

Here was a case where in one fell swoop an apparently excellent hotel-mgt. business was finally going to shed billions in debt and a pile of tough to sell real estate.

I was interested in the "toxic waste"; the "bad" Marriot (Host Marriot). Who the hell would want to own this thing?" was the way my thinking went.

I am contrarian because if I've thought through an issue I try to follow my own opinion even when the crowd thinks differently. Host Marriot looked like it had unsalable real estate and crushing debt-on the surface. $\qquad$

## What I look for in a spin-off:

Institutions don't want it and their reasons don't involve the investment merits. Host Marriot looked so awful that most institutions would be discouraged from doing any further research on the new stock. I vowed to read it-first, to see if Host was going to be as bad as it looked and second, because I figured almost nobody else would.

Another reason why institutions wouldn't wish to own it was its size. Not on its investment merits.

Host would account for only $10 \%$ to or $15 \%$ of the total value being distributed to shareholders, with the rest of the value attributable to the "good" business, Marriot Int'l. Host was going to own hotels while the business that attracted investors was the mgt. business. Indiscriminate selling might create a buying opportunity.

## 3. Insiders want Host Marriot.

Insider participation is a key area. Are managers of the new spin-off incentives along the same lines as shareholders? When all the required public docs about the spin-off have been filed, I usually look at this area first. Bollenbach was going over to lead Host Marriot (the "bad" company).

The Marriot family was still going to own $25 \%$ of Host after the spin-off. A good sign.
A previously hidden investment opportunity is created or revealed. In the case of Host Marriot, there was tremendous leverage. Host would trade at $\$ 3$ to 5 per share but have $\$ 20$ to $\$ 25$ in debt. That would make the approx. value of all the assets in Host $\$ 30$. Thus a $15 \%$ move up in the value of Host's assets could practically double the stock ( $.15 \times \$ 30=\$ 4.50$ ).

The good Marriot (Marriot Int'l) would be on the hook to lend Host up to $\$ 600$ million. It seemed the leveraged payoff had the makings of an exciting bet.

One of the primary reasons a corporation may choose to spin off a particular business is its desire to receive value for a business it deems undesirable and troublesome to sell. What better way to extract value from a spin-off than to palm off some of the parent company's debt onto the spin-off's balance sheet? Every dollar of debt transferred to the new spin-off company adds a dollar of value to the parent. Thus, there are many inordinately leveraged spin-offs.

The rewards of sound reasoning and good research are vastly multiplied when applied in these leveraged circumstances.

Host could be a good pick because:
Most sane investors were going to sell their Host Marriot stock before looking at it, which would, hopefully, create a bargain price.

Key insiders, subject to more research, appeared to have a vested interest in Host's success, and tremendous leverage would magnify our returns if Host turned out, for some reason, to be more attractive than its initial appearances indicated.

20\% of new company stock, Host Marriot, was made available for mgt and employee incentives. The debt was structured better than the newspapers made it appear. Host Marriot (the "bad" company) tripled within four months of the spin-off.

End of book portion

Marriot has a big franchise. So they had a big name. They know they have a certain standard. They had a good business. A real estate downturn caught their real estate holdings. Split the management business from the owning hotels. Stuck with many built hotels in a real estate hotel.

Spin-off crummy businesses into Host Marriot and keep the mgt. business in Marriot International.

I was always jealous of the leverage buy-out (LBO) guys. Leverage can be a good thing if the value is there.
Page 28 you had complicated financials. Page 31 Host Marriot Pro-Forma. Hugely leverage. Page 32 had a diagram of the business. Losing money on a pro-forma basis.

Skip to the chase. There was a parent corporation, Marriot International was the credit guarantor for Host Marriot. This subsidiary owed less money than what people thought. It did not owe $\$ 1.8$ billion of the $\$ 2.2$ billion.

Here is a parent that doesn't owe all that debt. It owes $\$ 400$ million, not $\$ 1.8$ billion in debt. There is a big discrepancy from what the market thinks.

The San Francisco Marriot - $\$ 250$ million of debt was on that hotel, but the debt was non-recourse. They couldn't attach the hotel. What looked like a huge leveraged thing when it was written up in the papers was not really true. Now I almost have a debt free business in the parent. We were paying about $\$ 4$ per share. Let’s write off the San Francisco Marriot-a leveraged play there--the rest of the assets were worth about $\$ 6$ plus we had a call on anything above $\$ 1.8$ billion in debt. They were probably worth more. Worth $\$ 3$ to $\$ 6$. We had a debtless parent worth $\$ 6$ plus a call on this plus I was only paying $\$ 4$.

## It all came from saying, "Hey, what was really going on."

In a spin-off, I look at how management is incented and the timing of when management is incented. So in other words, if the price is based on the first week of trading and the incentive is to strike the options at that price, they want to make it look bad. Mgt. doesn't want you to figure it out.

The next one was Liberty Media. When you see a great operator like that, look carefully. Malone, the CEO, took all his compensation in stock and he made it difficult to understand the plan. He created a big opportunity for himself. He wanted to make it difficult for others to buy the stock.

So although this stuff looks complicated, there is opportunity. Almost the more purposely complicated, the better. Unfortunately, those are the ones you want to look at.

We had a preferred issue in Marriot and the preferred was convertible into the common shares of Marriot. You had a choice of converting your preferred into common or into the bad business. They had to pick a conversion price. Mgt. made it look so ugly and I wanted to own the ugly business, Host Marriot. They wanted us to convert into Marriot Int'l instead of Host Marriot. The nether world of looking at obscure, complicated securities.

On Wed. we will talk about Amex and Buffett.

## END

## Greenblatt Class \#5

Your assignment is due next class on Wed. March 16, 2005. I could make up a session later. A one page report. We will have one guest lecturer on March $2^{\text {nd }}$ (class was cancelled).

My office hours are always 1 hour before class, Room 310.

## Summary:

- We will be talking about examples for your paper.
- We will talk about AMEX spin-off. Also, Research Examples—Charlie479
- You can ask questions of Warren Buffett.

March $16^{\text {th }}$ you can meet Eric Rosenfeld, a Canadian Carl Icahn.
Another speaker is Brian Gains, he runs a special situation value fund (Springhouse Capital) with a couple of good war stories. A smart guy.

My sister, Linda Greenblatt who has made high 20\% rates of return investing in the retail business.
Your Assignment is due March $16^{\text {th }}$. One page investment thesis backed by your work. Do your own calculations not just a cut and paste of a 10-K. Show a clear thought process.

Is this cheap absolutely or relatively? How did it pan out when you did the analysis? I am looking for your analytical skills. If you made some projections, I want to see how you arrived at them. A few pages of backup.

Don't print out comparable P/E ratios from Bloomberg. Use an EV analysis or Price/Sales analysis. I want to see EBIT/EV or EBITDA - Capex/EV. Your return on capital analysis. Use pre-tax cash flow.

EBIT to NWC plus Net Fixed Assets. Do some digging. Adjust accordingly.
What do I mean by Maint. Capex? See VIC example.
How would you go figuring that out? Let's say you built a few stores but they haven't opened yet but spent the money. Where does that show up? Call and ask the company. Then you can not believe what they tell you. Basically it is an estimate.

VIC Example: Six Flag Rides: Maint. Capex the ride is up, but you have to replace the ride every 10 years. But here, they have to add two rides every year or else they will have declining revenues. Consider this maintenance cap/ex not growth cap/ex because it is needed to maintain the current level of revenues.
You may disagree with his argument, but it is an argument to have. Another thing about Maint. Capex: You own a hotel business and it looks like maint. Capex goes along every year but it is not expanding. What is wrong with saying it is normalized after three years of average capex. The hotel business can bump along for 3, 5, 7 years without refurbishing charges and then you are hit with a big capex charge. You need to account for that. Normalize the big expenditures into the non-refurbishing years.

Burlington Industries (WEB) making capex by investing in new machines for production. That is a false payback period because everyone else buys the machine so the payback is almost never. Everyone else is doing that as well. A commodity industry with big cap/ex requirements and competitive environment is a poor investment. If you have a department store and you are in a competitive environment so you have to spend more to stay in place. Why he likes good businesses with a moat. All these things go into maint. capex. It is kind of an important question.

What I like about it (kind of hard to figure out sometimes) is that there is your chance to make some money. If they told you the answer, then there would be no opportunity.

Maint. Capex -level to maintain the level of sales. Look at PPE/Sales ratio.
Maintenance capex what it would take to keep earnings the same amount in the year you are looking at. What this says, don't fool yourself into thinking you have a better business than you think you have.

Short hand: EBIT/EV. EBIT assumes capex = D\&A. Usually you don't have a huge pickup. Usually, you have to spend your depreciation unless you are in a huge deflationary environment. Having said that, that is another thing to consider.

The company he won in a proxy fight. They were in the midst of doing a big acquisition. They bought a new plant which would not need new capex for a long time. Depreciation was a lot bigger than capex. The plant was at low capacity. If you are in business, you don't think of that-most people not looking at that issue. This was a huge pick up and it was what made the deal work. Huge depreciation on a plant that didn't need to be replaced.

PPE ---100 year life/depreciation. What are the real cash flows? Adjunct facts to that flow. Skip it if you can't figure it out. Or make a very conservative estimate and if it still has a huge margin of safety, then you can invest.

Why not include goodwill? Look at the operating business, not the acquisition skill of management. Look forward, not backward at sunk costs. What are returns based on tangible assets. What you paid historically for those assets doesn't matter, it is what those assets really cost. Your goodwill is how much more you paid for those assets than the original guy. But internally I have to pay maint. capex and I have to expand, this is telling me how much those assets are really going to cost me.

What kind of incremental return I will get. Your historical return on those assets may not be your future return, but that is where I would start or that is my single best guess. What type of incremental return I will get? What kind of business do I own? Is this pretax return on the capital I invest in the business-- $2 \%$ or $50 \%$ ? If I want to be stuck in a business with low returns on capital, I can always say there will be a big boost to earnings. In a big warehouse, whether you have 5 or 20 stores, you don't have to add capex incrementally. Now all incremental growth can use that base, then your returns on capital will rise. Look at store based (unit based) economics.

Look at single store base contribution instead of historical average.
How much money to put into the business?
A/R $\quad$ A/P $\quad=\quad$ NWC (the money you have to lay out)
Free money to others Free money to me.
Then you lay out for inventories. I took out the excess cash—cash greater than $1 \%$ to $2 \%$ of sales.
Negative WC business-McDonalds. As the business grows, you generate capital. It reverses if your business slows down. Do you count that as cash or something else? Eventually you will have to pay that cash. You have an industry loan.

Insurance company: premium income and investment income, then pay out losses in the future. WEB gets cheap capital from the insurance business and then he invests this cash or premiums at a higher return in equities.

Net Fixed Assets : gets updated—buy FA then depreciate then replace it. Assume capex = depreciation over time-a constantly updated number. Bought fixed assets then depreciate and eventually repay. Depreciation = capex. Don't throw out your brain. Everything has its own quirks. You adjust to the particular situation. Avoid formulaic thinking.

## Investment Handouts

Great investor/analyst and thinker: Charlie479. (An Investor who worked for a distressed investing fund-a very clear thinker and great investor).

I liked his thought process. $\underline{N V R}$ example.
6/20/2001 9:29:00 AM NVR (\$143.00) <NVR, Inc. > by charlie479
Rating 6.7 (19 users)

## Description:

$N V R$ is a homebuilder. Their operating model, which is unique (and which is described later), allows them to assume the least risk in the industry and produce returns that are the largest.

Homebuilders are generally dismissed because they're cyclical and interest-rate sensitive (really, though, which industry isn't?) and downturns inevitably leave homebuilders holding large inventories of unsold properties -the unlevered builders then suffer large inventory write downs while the levered builders go into bankruptcy. However, $N V R$ 's model will prevent it from suffering the same fate and, indeed, $N V R$ will prosper in a downturn at the expense of the weaker builders.

Two of the most important facets to its operating model are:
(1) $N V R$ acquires control of land inventory through options contracts. These contracts give $N V R$ the right to buy finished lots from developers. NVR secures a supply of land for its homebuilding operations through the use of these options whereas other homebuilders purchase land outright and engage in land development. By avoiding that speculative practice of land purchase/development, and instead using options, $N V R$ is able to control large blocks of land (years' worth) in its markets while employing less
capital to do so. The lower capital requirements of this method translate into lower inventory risk and greater returns on capital.
(2) $N V R$ pre-sells nearly all of its homes. Other homebuilders typically participate in some speculative construction. $N V R$ does not. Before $N V R$ begins construction, an order must be placed and a deposit made. This practice reduces risk and working capital requirements, which further enhance returns on capital.

In addition to $N V R$ 's superior model, consider the following:
-- Low valuation: $N V R$ trades at a P/E of $8.6 x$ trailing (7.1x 2001E EPS) and a TEV / EBITDA of 4.7x (trailing). TEV / (EBITDA - Capex) is 4.8x (trailing). TEV / FCF is 7.8x (trailing). I am defining FCF as Net income plus D\&A minus Capex.
-- Backlog: NVR has a backlog of 5,765 ordered homes. These homes represent $\$ 1.49$ billion of revenue. To put this into perspective, this is nearly three fiscal quarters of revenue. In addition, the homes in backlog carry higher gross margins than the ones in the historical results. All of this should translate into higher EPS. (Management says 2001 EPS should be just under $\$ 20$ per share. In the short history that the company has provided guidance (previously they refused to) they have consistently been ridiculously conservative. Their 1Q results and the backlog indicate to me that the $\$ 20$ EPS estimate continues to be the case).
-- High ROIC: The low capex nature of its business (\$301 mil LTM homebuilding EBITDA versus consolidated LTM Capex of $\$ 5 \mathrm{mil}$ ) and the low working capital requirements of its model allow $N V R$ to produce superior returns on invested capital: $45.3 \%$ in 2000, and 5 -year average ROIC of $25 \%$. Bonus fact: In 2000, $N V R$ sold $\$ 325$ mil more homes than it did in 1999, yet inventory (the bulk of a homebuilder's working capital requirement) increased only $\$ 11$ million.
-- Intelligent allocation of excess capital: High returns on capital and excess cash flows are only useful if you have a management that is smart about deploying it. In $N V R$ 's case, management has chosen thus far to deploy that capital to buy back its own stock. Between $12 / 31 / 93$ and $12 / 31 / 00$ the company reacquired 13.5 mil shares. In the first quarter of 2001, $N V R$ purchased another 0.85 mil shares For perspective, there are only 8.1 mil primary shares out today (I'm using primary shares to illustrate this but I use diluted shares for enterprise value calculations).
-- Homes a basic necessity: People will always need homes to live in. The process of building a home has not changed materially in decades. Neither of these statements is likely to change in the next year, the next 5 years, or even the next 20 years. There is minimal technological or obsolescence risk.
-- Dominant in its markets: $N V R$ competes in 18 geographic markets. It is the \#1 player in 10 of them. As for the remaining 8 , it is usually \#2 or \#3 (always at least in the top 5). The rest are markets that NVR has just recently entered and will dominate with time.
-- Tax factors: The industry has indirectly enjoyed the benefits of a government subsidy in the form of tax deductible mortgage interest. Additionally, in the last few years, homebuyers no longer have to pay tax on the first $\$ 500 \mathrm{k}$ of capital gains on a home. This lowers the effective purchase price of a home for a consumer, increases the relative attractiveness of a home as an investment, and adds a little boost to demand for NVR's product.
$N V R$ 's profits and market dominance are all the more amazing when you remember that the results have been achieved without land development. $N V R$ has margins better than its competitors despite the fact that other homebuilders benefit from the gross margin boost of speculative development in an inflationary environment.

## Catalyst:

The small number of shares outstanding occasionally creates large downward gaps. NVR's recent $25 \%$ drop is one such opportunity. Also, share repurchases will continue to drive the stock. It's hard to overemphasize the magnitude of the repurchases or the wonderful track record of buybacks:

```
12/31/95: 15.21 (millions of shares outstanding)
12/31/96: 13.57
12/31/97: 11.09
12/31/98: 10.39
12/31/99: }9.1
12/31/00: }8.8
04/18/01: }8.1
```


## 6/24/2001 10:39:00 AM

## To: elan19 From: charlie479 Subject: elan

I understand your example but I think your conclusion is incorrect. I'll show that $N V R$ 's model actually produces *inferior* absolute profits versus the competition in a stable or inflationary environment (as a tradeoff for better returns on capital) but produces superior absolute profits versus other builders in a deflationary environment. Given that we have been in an inflationary environment for the last 7 years or so, it is all the more amazing that $N V R$ has been able to produce profits consistent with operators which are using a riskier (but, in an inflationary environment, inherently more profitable) model.

Let me use an example with slightly different numbers than you did:

1. $N V R$ buys a two year option on a piece of land with a current market value of $\$ 100 \mathrm{k}$. The option costs $\$ 5 \mathrm{k}$ and entitles them to buy the land for $\$ 100 \mathrm{k}$. (I believe these figures are closer to reality - it costs about $5 \%$ of land value for an at-the-money land option).
2. Homebuilder "RVN" buys the same piece of land for $\$ 100 \mathrm{k}$.

Let's consider 3 scenarios: an environment of rising prices, stable prices and falling prices.
Rising prices. In one year, if the land price rises to $\$ 110 \mathrm{k}$ and $N V R$ and $R V N$ build a house on the land and sell it, $R V N$ will have an embedded profit of $\$ 10 \mathrm{k}$ on the land whereas $N V R$ will have an embedded profit of $\$ 5 \mathrm{k}$.
$R V N$ and $N V R$ will sell the house to the consumer at the same price, but $R V N$ will realize a higher profit.
Stable prices. If the land price stays at $\$ 100 \mathrm{k}$, the result is similar. $R V N$ has no embedded profit, while $N V R$ has an embedded loss of $\$ 5 \mathrm{k}$. Again, $R V N$ will realize a profit that is $\$ 5 \mathrm{k}$ higher than $N V R$ 's.

Falling prices. If the land price falls to $\$ 90 \mathrm{k}, R V N$ will have an embedded loss of $\$ 10 \mathrm{k}$ but $N V R$ 's loss will be limited to the $\$ 5 \mathrm{k}$ value of the option. $N V R$ will simply not exercise its option and instead purchase the land at the current market price of $\$ 90 \mathrm{k}$. (NOTE: I think you incorrectly imply in your example that $R V N$ is no worse off than $N V R$ in this case because it can also purchase the land at the current market price of $\$ 90 \mathrm{k}$ and incur no loss. This is not correct. RVN has already purchased the land - it cannot purchase it twice. Even if RVN finds an identical property that it can buy for $\$ 90 \mathrm{k}$, it does not eliminate the fact that it has an embedded loss of $\$ 10 \mathrm{k}$ on the first property).

There are two additional observations that can be drawn:

1. In a deflationary environment, buyers may not at all be interested in the specific property that $N V R$ and $R V N$ bought! Buyers may instead want a property in the next town, or something near the highway, or something in blue. $N V R$ will be able to respond by walking away from their option on the property and then buying the lot in the next town near the highway with the color blue. $R V N$ will be stuck. It will have to wait for a buyer to show up for its property, risking further price decreases in the meantime.
2. Theoretically, $R V N$ could also try to buy the blue property in the next town to satisfy the buyer. However, $R V N$ will likely face capital constraints when it looks in its piggy bank for funds to buy the second property. Remember, $R V N$ has already incurred $\$ 100 \mathrm{k}$ of debt to buy the first piece of land that it holds in inventory. It's unlikely they'll be able to borrow another $\$ 90 \mathrm{k}$. ( $R V N$ may have enough cash to do this the first dozen times, but multiply these figures by the thousands of lots that builders have in inventory to see why the debt amounts would be too large. Note that most builders currently have significant debt. NVR has almost zero net debt). $N V R$, meanwhile, has only incurred $\$ 5 \mathrm{k}$ of debt, so it has the financial flexibility to purchase the land.

## 6/24/2001 6:34:00 PM

## To: elan19 From: charlie479 Subject: elan

Management has said that options are typically $6 \%$ to $7 \%$ of land value. This is not quite as cheap as the $5 \%$ I used in my example, but I agree with you that it's still fairly cheap. I will try to confirm these prices again.

You raise a good follow-up question: if the options are so reasonably priced, why don't the other builders go in and bid on them? I have two theories on this: (1) The other builders still prefer outright land purchases instead of options because of the greater profit potential in an inflationary or rising environment. Therefore, competition for land is always intense, but not necessarily for options. (2) There are local oligopolies in the homebuilding industry. Builders need a certain threshold level of construction and sales activity in an area to reach economies of scale for purchasing materials, showcasing model homes, having sales agents, etc. If there is a builder that already controls most of the land in a locality (years' worth, even), it is difficult for another builder to get enough inventory to support a critical level of sales (regional economy of sales). Therefore, even if there are options here and there to acquire at cheap/reasonable prices, competition for them is limited to existing builders in the area with enough scale. Note that $N V R$ is the largest builder in over half its markets, and is number 2 or 3 in almost all the rest.

Your question deserves a more thorough answer, so I will attempt to get management's opinion about why other builders don't compete vigorously for these options, and what motivates developers to sell options at such prices.

I agree that this could be one reason management does not like to communicate with the street. The other rumored reason is that $N V R$ has been an eager acquirer of its stock and management is interested in increasing its stake relative to the public float at the cheapest price possible. I've never quite believed this (sounds too much like a conspiracy theory). I think the most likely answer is they just don't like the Street and prefer to focus on the operating the business than promoting the stock.

10/2001 6:02:00 PM

To: charlie479 From: charlie479 Subject: follow up for elan The example we were using was a little too simplified and ignored cost of capital. Therefore, the example produced a result that showed the developer was not being compensated for his cost of capital (or his development efforts) if he went down $N V R$ 's option path.

In reality, the developer would be compensated for cost of capital and their development efforts. For example, for a lot worth $\$ 100 \mathrm{k}$ in 2 years that $N V R$ would pay a $\$ 5 \mathrm{k}$ deposit for today, a developer might be able to sell that same land now but they wouldn't get $\$ 100 \mathrm{k}$ for it. The sale price would be something lower -- with the difference being the profit that the developer gets in return for holding and developing the property over that time period.

This does not alter the conclusions of our previous example. Other builders will enjoy higher embedded gross profits per unit than $N V R$ in a stable to rising environment but they will tie up more capital (and produce lower returns) to do so. Obviously, the other builders assume more risk and it shows up in the falling price environment. $N V R$ will not have large amounts of capital tied up in a recession and its losses on inventory will be lower than the other builders. The other builders will likely be left with large amounts of debt while they try to liquidate excess land.

Despite this inherent gross profit disadvantage in the recent inflationary environment, $N V R$ has in recent years been able to generate gross margins that compare favorably to other builders. I am repeating what I've already said in previous posts but I believe this is a result of their operational efficiency and dominant position in its markets.

9/19/2001 11:37:00 AM
To: gophar571 From: charlie479 Subject: gophar
which companies in the space do you feel are most overvalued? - is there a paired trade opportunity that makes sense?

I generally discourage a paired trade in this industry. This is not because I disagree with your assessment that most of the companies in the sector are bad businesses, but because many of these companies already trade for extremely low P/Es. The potential downside of shorting something with a low P/E (even in a paired trade) can be massive.

That said, if you insist on shorting something as part of a pair, I'd do a simple screen and pick out the most leveraged lenders. These are the ones run by aggressive management who have been unable to resist accumulating inventory. Centex pops up at the top my screen.

5/27/2002 7:30:00 PM

To: mark227 From: charlie479 Subject: Options
The options grants for this company are excessive and the board's allowance of it is repulsive. This is the main negative of this stock.

The 10 K has the correct issuance number in 2001. The exact number is not important. The bigger point to realize is that this company is reducing its stated earnings by a significant measure by issuing options every few years.

There isn't a lot of reassuring things I can say about the options program. It's essentially one of the costs of owning this otherwise very sound operation. I have drafted a letter to the board but have not gotten around to
sending it. Perhaps several letters from VIC members will get them to change their long-term compensation policy.

2/11/2003 3:38:00 PM

To: charlie479 From: charlie479 Subject: tim321
The cash flow statement is indeed pretty good. There is almost no capex so all of the operating cash flow is available for share repurchases, which they have been eagerly doing.

Management indeed pays no attention to wall street coverage. It's a great thing.
I noticed your previous msg. I would send you an email but the address seems to be deleted from the post. It's probably better to post the question on VIC anyway.

## Joel's comments on NVR

$N V R$ has good returns on capital because they use options instead of owning huge tracks of land. That is his thesis: they don't lay out a lot of capital. They pre-sell so they don't do much speculating. How big an amount do people put down on their homes. In a recession people walk out on their deposit so $N V R$ gets stuck with inventory.

Geographically diversified. This was written up in 2001. A high return on capital business at a low multiple 4.8 x with smart management that is buying back stock. I would look out three or four years and ask what a normal environment might be-is this a good business? Are we way above normal earnings? All we have to do is be well capitalized enough to get to normal. He makes a very good thesis.

11/27/2002 11:15:00 AM NIHD (\$3.41) NII Holdings by charlie479 Rating 6.6 (35 users)

## Description:

NII Holdings, which was formerly named Nextel International, is the first investment idea in over a year that I have found worth posting.

NII Holdings was incorporated in 1996 as a wholly-owned subsidiary of Nextel Communications (NXTL) to hold all of NXTL's international wireless assets. Between 1996 and 2002, NXTL invested over $\$ 500$ mil in NII and bondholders invested an additional $\$ 2$ bil. in the company to finance the build-out of NII's wireless network.

Struggling under the weight of its massive debt load, the company decided not to pay a coupon due to bondholders on February 1, 2002 and the company then filed for bankruptcy in Delaware on May 24, 2002. In the ensuing months, the company and its advisors (Houlihan Lokey and Bingham Dana) worked with creditors on a plan of reorganization and on November 12, 2002, NII Holdings emerged from Chapter 11 with a substantially de-leveraged capital structure.

The following are the main arguments for investing in the company now:

1. Under-researched, neglected equity - Having just emerged from bankruptcy, NII’s shares began trading on the OTC Bulletin Board a few days ago. There are no equity analysts following the situation. Much of the financial detail is buried in hundred-plus pages of disclosure statements and plan documents.
2. Low valuation - The company's enterprise value is 2.8 x current annualized EBITDA. The valuation isn't easily discerned from the public filings so I will post the details in a follow-up post.
3. Spectrum rights - Spectrum rights are a source of "moat" much like cable TV franchise rights or
broadcast radio license rights. NII owns the rights to spectrum in the 800 MHz region in Brazil, Mexico, Argentina and Peru.
4. Differentiated wireless offering - NII offers all of the wireless calling features that traditional wireless operator's offer. However, NII offers the Direct Connect feature that its competitors do not (and cannot without expensive network overhauls). Direct Connect is a walkie-talkie-like function on Nextel phones that provides an instant connection to other users in one’s designated calling group. For example, field supervisors can simultaneously convey work order changes to multiple field agents using Direct Connect.

This Direct Connect feature has two primary benefits: (1) it is a service which is preferred by many business users (such as the above field agents) which tend to generate higher average revenue per user than traditional wireless users and (2) once users get set up into a calling group, there is a natural reinforcement against switching to other carriers (the field agent that leaves Nextel in the above example would cut himself off from Direct Connect messages from others in his workgroup). Indeed, all of the Nextel companies have shown higher ARPU and lower churn rates than the traditional wireless carriers over a sustained period of time.
5. Capital structure has been fixed - NII's plan of reorganization converted $\$ 2.4$ bil of bonds into equity. In addition, several credit facilities paid down and a $\$ 100 \mathrm{mil}$ Argentina facility was settled for $\$ 5 \mathrm{mil}$.
6. Public comps trade at higher prices. While I'm not a fan of comparable company analysis, it's worth noting that investors are willing to pay 6.9x 2003 EBITDA for NXTL's equity and over 10x for Nextel Partners' equity (NXTP). The average of the traditional wireless carriers is 6.7x. (Note that I am using 2003 EBITDA for the peers but current run rate in calculating the multiple for NII). If NII were to trade at a 5 x EBITDA multiple, the stock price would be $\$ 28.10$.
7. Non-core assets not included in valuation -- In addition to the 1.2 million subscribers it has in its 4 primary markets (Brazil, Mexico, Peru, and Argentina), NII owns wireless assets in Chile and the Philippines. The latter two do not contribute to cash flow and NII is in the process of selling its Philippine stake.
8. Strategic importance to Nextel Communications. NXTL customers are able to roam on to NII's international network. As an indicator of how important this is to NXTL (particularly in the adjacent Mexico regions), NXTL agreed during the bankruptcy to pay $\$ 50$ mil to NII to ensure the build-out of certain regions in NII's territories. NXTL has also made an additional investment in the reorganized NII. NXTL now owns 36\% of the common stock of NII.

## Catalyst:

1. Emergence from bankruptcy.
2. Eventual move off of the bulletin board onto NASDAQ should raise the profile of NII. Investors in NXTL and NXTP will start to notice NII. Valuation will normalize to 5.0 x EBITDA from 2.8x EBITDA currently. NII would trade at $\$ 28.10$ if it were to achieve a 5.0x EBITDA multiple.

10/3/2003 2:06:00 PM

To: charlie479 From: charlie479 Subject: legg mason
It's shameful to post this but luckily I am a shameless guy.
I thought VICers might find it funny that the title of the report is "Attractive Early-Stage Opportunity"
RESEARCH ALERT-Legg Mason starts NII Holdings with 'buy' CHICAGO, Oct 3 (Reuters) - Legg Mason on Friday started coverage of NII Holdings Inc. , which provides wireless service in Latin America, with a "buy" investment rating and a 12- to 18 -month price target of $\$ 82$ per share. "NII offers a better competitive dynamic than the U.S. wireless market with only three to four players per market, no wireless local number portability exposure or push-to-talk competition, and the ability to transfer Nextel's proven business model to

Latin America," analyst Craig Mallitz said in a research note.
NII, a former unit of Nextel Communications Inc., sells wireless service in countries such as Mexico, Brazil and Argentina to primarily business customers. Its selling point is a unique walkie-talkie feature that lets users connect to others instantly with the push of a button instead of dialing a number.

Shares of NII rose $\$ 3.11$, or nearly 5 percent, to $\$ 65.91$ in NASDAQ morning trading. The stock has risen more than ten-fold since last November, when the company emerged from Chapter 11 bankruptcy protection. Reporting by Yukari Iwatani; editing by John Wallace; yukari.iwatani@reuters.com; Reuters Messaging: yukari.iwatani.reuters.com@reuters.net; 312-408-8787))

## Joel's comments on NII

Next example: Catalyst: just came out of bankruptcy. It will go onto NASDAQ. There are reasons that it will become more discovered. Not to say it will be a popular stock. The reason he is using EBITDA is because they already have sunk $1 / 2$ billion into the network so capex is baked into the number. Low valuation 2.8 EV/EBITDA. Look where the their bread is being buttered. Watch mgt. Nextel owns 36\% of this company. This company may have staying power because Nextel needs these guys. In fact, Nextel did pay up for a build out of their network.

He builds a thesis: it is cheap, low relative value analysis. They have a differentiated product; they have a moat, there is growth opportunity. Just at $30 \%$ of similar business valuation the stock would go up by $70 \%$.

## The stock will triple if we get any type of reasonable valuation.

It can make sense and not work out.

6/9/2003 9:37:00 AM SGDE (\$9.72) Sportsman's Guide by charlie479
Rating 6.2 (37 users)

## Description:

Sportsman's Guide has an unleveraged return on equity of over $35 \%$ and trades at 4.85 x free cash flow (defined as operating cash flow minus capital expenditures).

The company is a retailer of sporting gear and other outdoor items. It sells its products primarily through its catalogs and web site. If you are not familiar with this company's wares, please check out www.sportsmansguide.com and spend freely.

1) The company has a strong niche brand. Its customer following has been cultivated since Sportsman's Guide was founded in 1970 as a catalog of products targeted at deer hunters. Over the years, founder Gary Olen has broadened the original catalog into a business producing $\$ 180 \mathrm{mil}$ in revenue per year through a series of monthly catalogs with a distribution of 46 million per year.
Indicative of the loyalty of the customers is the success of the company's recent Buyer's Club initiative. Buyer's Club members purchase a yearly membership for $\$ 29.99$ to receive catalogs with limited run items available only to members. Members also receive $5 \%-10 \%$ discounts on most items. The number of members was 310,000 at $12 / 31 / 02$. Membership grew $22 \%$ last year and has continued to grow in the 1 st quarter.
2) A key competitive advantage for a catalog marketer is its database of customer names. $85 \%$ of the company's revenues come from existing names in its database of sporting and outdoor enthusiasts. Sportsman's Guide has 5.2 million names with demographic data and purchasing history in its customer files. Of these, 1 million names have purchased a product within the last 12 months. Over time, the company has used response data to subdivide this database into subsets of customers. These subsets receive different specialty catalogs in addition to the main Sportsman's catalog. The specialty catalogs have different product focuses: government surplus, camping, shooting, hunting, etc. Subdivision improves response rates which reduces unnecessary mailing costs and improves economic returns.

Ever since the launch of the online Sportman's catalog, the database has also been supplemented with email lists. There are approximately 900 k names in the email database and nearly all of them receive a broadcast email every 1 or 2 weeks.
3) The company's "bargain" focus is hard to replicate. The company has developed a customer following partially because of its history of value-priced bargain items in its catalogs. These items are $25 \%-60 \%$ off retail. The company is able to offer these prices to customers because the company's buying agents comb for discontinued /liquidation/overstock items through a network of 1200 supplier contacts. Because the supply of overstock items is irregular, it's critical to have the ability to purchase opportunistically and store cheaply.

All inventory is stocked in Sportsman's warehouses in Minneapolis. Catalogs are customized to include these overstock items shortly before printing so the inventory carrying period is minimized. The company's customer base of bargain hunters allows $S G D E$ to move these items faster than other competing retailers. What cannot be sold via its regular catalogs and online store is liquidated through its bargainoutfitters.com site and a small retail location the company has in Minnesota. Everything from the low grade paper in the company's catalogs to the incentive systems for maintaining high shipping accuracy is aimed at selling cheaply and producing a solid return on capital.
4) I believe there is a fundamental shift in SGDE's business that is reducing costs in the company and improving return on capital. It's this fancy new thing called the internet.

Up until 1998, all of the company's business was done through print catalogs. Millions of these catalogs were distributed each year with each one incurring shipping and printing costs. There's also higher production costs and longer product lead time required when doing business by catalog. The company began its web site in 1998 and by February 1999 had its full product offering on the web. Sales generated through its web site have grown each year from 1998 to 2002: $\$ 1 \mathrm{mil}$, $\$ 14 \mathrm{mil}, \$ 24 \mathrm{mil}, \$ 36 \mathrm{mil}, \$ 53 \mathrm{mil}$. The company is encouraging this transition by prominently mentioning the web site in the catalogs it continues to distribute. In the 4Q of 2002, internet sales generated $30 \%$ of total company sales.

So what? Well, aside from the reduced capital needs, the company has a chance to take out a major portion of its operating expenses if it can successfully transition its business to the internet. Its current cost of distributing catalogs is approximately $\$ 30 \mathrm{mil}$ a year. A large portion of any reduction of this $\$ 30 \mathrm{mil}$ in expenses would drop to the bottom line. Considering that free cash flow is currently $\$ 8.3$ mil, even a small amount of savings would produce a large effect. The company has reduced catalogs mailed from 80 million in 1999 to 46 million in 2002. SG\&A (which include the catalog costs) has been falling: 34.8\% of sales to $30.8 \%$ in 2001 to $29.3 \%$ in 2002. These are the initial signs of the internet's impact on Sportsman's business.

## Catalyst:

The company has recently initiated a share repurchase program to retire up to $10 \%$ of its outstanding stock. The company has a history of returning capital to stakeholders. $\$ 7.4$ mil of debt was paid down in 2000. $\$ 5.2$ mil of debt was paid down in 2001. (In 2002, cash simply built up because debt was retired). Now that the company is debt free, it is using a portion of its cash hoard (currently equal to about $20 \%$ of market cap) to retire a substantial number of outstanding shares.

6/9/2003 12:48:00 PM

To: charlie479 From: charlie479 Subject: ben111 Free cash flow
I've been measuring free cash flow over calendar year periods so that may produce our difference in calculations.

For the last 3 years, I have:
Year
OCF - Capex = FCF

2002 9.2-0.9 = 8.3
2001 13.0-0.5 = 12.5

2000 10.2-1.5 = 8.7

I chose to use the $2002 \$ 8.3$ mil for free cash flow in my calculation. For enterprise value, I get $\$ 40.3$ mil ( $\$ 46.3$ mil market cap plus $\$ 4.9$ mil for options minus $\$ 10.9$ mil of cash at $3 / 31 / 03$ ). This gives me a EV/FCF multiple of $4.85 x$.

I suppose it doesn't matter much whether multiple is 4.85 x or 5.2 x . It's pretty cheap either way. There are few companies with free cash flow yields of around $20 \%$.

Thanks for posting this. Wish you had told us about it two years ago before it went from $\$ 2$ to $\$ 10$.
I'll post it earlier next time :) But, hey, I wish someone would have told me about Berkshire Hathaway decades ago.

I try not to look at the historical charts too much. They should be irrelevant to investment decisions today. I've found that staring at the charts sometimes leads to irrational (and sometimes harmful) buy/sell decisions.

6/9/2003 1:23:00 PM

To: zzz007 From: charlie479 Subject: zzz007 Insider sales
I don't typically look at insider sales because it's as critical to me as the quality of the business and other factors. It is an interesting fact that you point out, though. I believe Paletz is retired and draws no salary from the company (the other co-founder is still an employee) so he may be selling shares to provide for some retirement expenses.

Shiel had plans to retire this year from the board of directors. I suspect that his selling is related to his retirement as well.

6/9/2003 11:01:00 AM

To: ben111 From: grant387 Subject: Re: cash flow
Charlie, I think this is a fantastic idea.
Ben, in regard to cash flow figures, if you look back over the past three years, you'll get an average FCF (CFF0 -PPE ) $=\$ 9.8 \mathrm{MM}$.

If you take an EV of about \$37MM now, I get a EV/FCF of 3.78.
If the top line continues to grow a bit and they keep wacking away at the expense side, cash flow will continue to grow at a healthy rate. This is a very good story.

Charlie, I also really liked your QUIPS write-up and your legal analysis was $100 \%$ correct...it is a shame that big money sometimes tramples over the little money in this world, leaving the little guy with no leverage
whatsoever.

Next one: SGDE.
It is amazing what you can say in one page. What differentiates this business-they are good at sourcing goods-cheap sportsman's stuff. Now they can do the same thing on the Internet. But others can do the same?

One of my concerns would be growth hampered by lack of close out merchandise. Lomans had to manufacture junk rather than buying the stuff.
SGDE Lomans couldn't scale. Find junk vs. manufacturing. Grow-can they source close outs.

SGDE worked; it went to $\$ 24$. Cheap. Lesson: Buy cheap with good ROC. He makes a case that they have a great network. In effect, they have a brand name. People know this is a place to buy low priced sporting goods.

The Internet brings competition.
Part of this is the very low valuation. There is $\$ 2$ per share in cash. Paying 5 times cash flow or $20 \%$ yield and interest rates are $4 \%$, this would work out. I bought this one because he picked the other two. This was the weakest of the three he picked.

One of the best classes is to go over the mistakes from the papers handed in on the $16^{\text {th }}$ of March. We will review on March $23^{\text {rd }}$.

Read the first one:

Use the VIC write-ups as a model.
Why pre-tax numbers vs. after-tax numbers.

Last year's tax was weird. Factor in the long-term tax effects. Take away aberrational effects of tax. Factor in different tax rates.

If I am looking at an acquisition for a company, I look at pre-tax returns.
Pay $10 \%$ to borrow and pay 8.5 times FCF or $12 \%$ yield. Investment bankers will say this will be accretive to earnings. I will not look at the 50 page investment bankers’ book. I just say look, my pretax cash flow based on what I am paying ( $12 \%$ and very stable) vs. what I must pay $10 \%$ debt (cost of money). I buy these assets for $x$ price ( $81 / 2$ times FCF), they will generate a coupon over time of $y$. That coupon pretax equals $11 \%$ and borrowing costs were $9.5 \%$, then I can leverage up and make the spread. But the debt is a floating borrowing rate. I am buying an $11 \%$ coupon which could shrink and I am paying 9.5 percent for a tiny spread $1.5 \%$. I am wasting my time for a company with 1000 's of employees and a lot of moving parts.

You can see how you can leverage. You get no margin of safety. Simple analysis says, "What are you kidding" No matter how good they make it look. This may seem like a simplistic way to look at the world, but I think it is a clear way to look at the world. It is not that hard. But they can make it look really hard.

If you walk out of this class thinking these simple thoughts, you will be ahead of 99.9 percent of the people who know how to use the spread sheets and put together the big books. Buffett says, "Look at it as a coupon." I am choosing to look at it pre-tax. Is the coupon growing or shrinking? How confident are you of the business? If you can't answer those questions, you have no business being there. And if you can, then you try to get the best deal you could. It is reasonable to have ball parks. When I say look at EV/EBIT and EBIT/ (ROC), what I really want to determine is how good a business is this? What are normalized earnings three or four years out? Is it a $30 \%$ or $15 \%$ or $50 \%$ ROC business?

What am I looking at? And then how cheaply I can buy the business. There is a matrix between what extra ROC is worth. How much you can reinvest in that business to get the ROC. How much growth with or
without investment. I bet when Buffett makes his decisions in 30 seconds, "Hey, it is worth about $\$ 10$ and I can buy it for about $\$ 5.50$ so maybe it worth $\$ 9$ or $\$ 11$, but the $\$ 10$ is going to be growing over the years. It is trading at $\$ 7.50$ and the $\$ 10$ is going to be worth $\$ 13$ two years from now. How to get a 30 to 60 cents dollar. He is doing that in his head. If you have got a good business, you have a particular niche.

The reason it is simple, because you can choose the ones you do have an opinion on and then it does become easier. It isn't easy because you pick and have to analyze 1000 companies. It is a big gap.

## AMEX Spin off

Any thoughts? Big picture: they had two businesses: American Financial Advisors, AFA, is a financial advisory business that isn't earning high returns on capital. There could be an argument why aren't they earning higher returns on capital. Is the business not being run well? There are values not being realized. In the TRS business those will be $28 \%$ to $30 \%$ once we strip out the AFA business ( $11 \% \mathrm{ROE}$ ).

56 cents next year for AFA and he slapped a 16 multiple on it (good or bad, I don't know) and said it is worth \$9. Since the stock is trading at $\$ 55$ now and it will happen in 6 or 7 months. If I think there is an opportunity in $A F A$, then I have to wait for when $A F A$ starts trading. Its value is a small part of the whole. I need to be ready when it comes out to assess the value.

On the other hand, I could look at the "good" business, the TRS business now. In this particular case, I think I can look now because the moving piece that I have to pay for now is reversed-the $\$ 55$ stock has $\$ 46$ in value for the good business. I can today, in effect, buy now. If the stock is $\$ 55$ now and the $A F A$ is only worth $\$ 9$, then $\$ 46$ value is with the good business. I can analyze that business now rather than wait for the spin off. Of course, I have to value $A X P$ to know what I am paying for the $T R S$ business to see if there is an opportunity there. This is why I would look now.

## Thoughts?

The terms of the deal. The press release was a bit confusing. There was a conference call off the net. I think this is pretty much what they say: the separation of two businesses-one with high ROC and the other with low ROC that have no synergies.
Hey, will I get a higher multiple businesses on the good business? Now I will own a business which has high ROC. If you just buy TRS, you get a purer business with high returns.
$A X P$ has a billion and a half shares and everyone is looking at it. There are many analyst reports. I still look at it. I made money in Sears. Even in a simple one-I would rather have a big mess. Here, what you see is what you get.

Student: AFA (financial advisors) used to be a good business. In the bubble they earned $22 \%$ to $24 \%$ ROE. It seemed like it was still a pretty good business. But you are developing a thesis. It is $11 \%$ and if ROE gets back to $19 \%$, then earnings will go up $78 \%$. Book value would be a better metric comparing to Schwab and Alliance Capital?

Joel: What I try to do, I take everything down to earnings power. Why aren't they trading three times book? Is Schwab's business better? If other people can do it, they can to. But at the end of the day when you do your valuation. I am very suspect of the number of hospital beds going for $\$ x$. I want to be very comfortable what they will earn four or five years out on a normalized basis. What will earnings look like and translate Schwab's earnings and then compare. If AFA is trading at 1.5 times book while Schwab is at 3 times, then maybe there is room here.

If they are getting rid of it, may be it stinks (one analyst). Buffett owns $15 \%$ of $A X P$. They wouldn't make a move without his approval. My first guess is that a high ROE should get a big multiple. Mgt. focus and better direct compensation due to the spin off. Capitalism works. Buffett will hold both pieces. Perhaps they are not getting a high multiple on their good business and there is no synergy between the businesses. I am looking at the combined. I look for a three to five year horizon.

WEB "A fat wallet is the enemy of returns." Gee, if I had $\$ 1$ million to work with, I think I could make 50\% a year. Somewhere between $15 \%$ to $50 \%$ lies your opportunity, I think to do things differently. He has to buy good businesses and not trade them in large size, because he can't get out. Time is the enemy of a bad business. If he (WEB) is stuck in a bad business, he will get low returns. He can't trade "cigar butts" returns.
$A F A$ was a good business in the past and it should be a better business in the future. They did enough to screw it up. We will have 9.6 billion in assets (in CC available on the web-site). The good business will have higher returns since we are separating the lower return business (11\%).

## Joel: I will show you what I did regarding AXP.

I did develop a thesis. AEFA (spin-off from $A X P$ ) is too small for me to focus on now. A page from the 8-K announcement.

If you have a business growing $12 \%$ to $15 \%$ with $30 \%$ ROE you should have a good multiple, you should be buying back stock or paying a dividend. Why wait around to fix the business? This is probably a more strategic way to operate the company.

Looking at page from 8-K. How would you look at newly announced spin-off and what type of thesis could you come up with? How much work do you have to do? This is somewhat of a complicated business.

Most of AXP's business is charge cards. They just won a lawsuit against MasterCard and VISA who were not distributing $A M E X$ cards. It is a particularly good business.

Frankly we bought Moody's for 20 x earnings, and I thought it was too low. I am not turned off by this business at 20 x EPS—a high multiple--if I think it is a really good business. It can't possibly be as good as Moody's but it could be good given the ROC.

If you buy from a store, $A M E X$ gets $1.5 \%$ or $2 \%$ of the purchase. Their cards will be distributed more widely after winning the lawsuit.

They have a lending business-
Travel commissions and fees is $\$ 1.8$ billion-I thought it would be a lot bigger number. A recession could have been a problem. 9/11. This was a 1.8 billion five years ago. Drop off of 300 million. After tax 12 to 15 cents loss in a bad downturn. This year TRS will earn $\$ 2.50$. Not going to be a big mover, Frankly, I don't know if we are above trend because of the drop off. You can argue we are not way above normalized.

Another business: give out AMEX money card. Pre-paid card. That business is growing. You give them the money and you get a traveler's check. A very high profit business.

Then they have Finance charge revenue which was $\$ 2.2$ billion plus they securitized their credit card receivables-AMEX takes those receivables and packages them into a security and sell that security to another institution. $A M E X$ keeps part of the risk to get a better price. They don't have to tie up their capital; they can make their spread right away. My problem with this is that it is not a high multiple business-an 11 to 12 times business-because losses are below normal due to good economy.

Does AMEX have a better business not what percentage of its business-you don't know how to allocate how much in expenses to this business. You don't know how much income is coming from this business. If you were to evaluate each of their businesses whether it is the charge card business or TRS business, you want to put different multiples on each of those businesses to figure out what the pieces are. You would have to grapple with the issue: what percentage of income do I apply that low multiple to? And what I would struggle with: are they really comparable to those lower multiple businesses? They have a higher credit profile, they have a closed network-it feeds each other because if you use their discount card, it still adds to the discount revenue-you don't know how to untie all those things, they are all mixed together.

So one of my thesis for liking this a lot: I will tell you the quick and dirty on that: Perhaps $80 \%$ of the things you look at, you won't get a good answer. What are the issues to decide?

ROC is growing, I would normalize the credit spread. In 2007, what will the 2007 TRS business earn? 15\% rate of growth in this business, net of the corporate overhead will earn $\$ 3.20$ per share and \$55-9 = \$46.

We are earning above average spreads. Normalized spread would be 27 cents a share. In three years this will earn $\$ 3$ and this business should earn $40 \%$ ROC three years down the road because they are taking capital out of the business that they don't really need it. They also said in the release, last year between stock buybacks and dividends, we paid out over $87 \%$ of our earnings. They are able to grow without much reinvestment. They pledged no less than $65 \%$. I am guessing it is over $70 \%$ to $75 \%$. The rest they will have to reinvest back to grow at the rate they say they will. I don't know if I am right about where the $\$ 3$ goes to.

Take the 10 year bond yield - 6\%. Let us try a 20 multiple on the business of 5\% earnings after-tax yield which is growing $12 \%$ to $15 \%$ a year with high ROC (assuming I believe that-you heard Rich Pzena saying there are only a few companies which have sustained such a growth rate over 10 years) vs. my opportunity cost of $6 \%$ ?

Any growth over 8\% in a dividend discount model, you get prices off the charts. Take three years of 12\% then $8 \%$ then $5 \%$. I would rather have $5 \%$ growing than $6 \%$. This has never been a business by itself.

Assume a 22 multiple (for a great business) and assume AEFA is $\$ 9$ and exclude any other earnings, net of what they pay in dividends, so we collect another $\$ 3$ or $\$ 4$ dollars. 22 times earnings you can make a case for $\$ 80$.
$22 \mathrm{x} \$ 3$ EPS $=\$ 66$ then $+\$ 9$ for $A F A=\$ 75$ and the earnings from the bank $\$ 1$ and add earnings net of dividend payments, let's say you collect another $\$ 3$ so $\$ 79$ to $\$ 80$ per share. That is a $20 \%$ rate of return from here. You get back your money, \$9 in a year.

That is the beginning of a thesis. I don't know if that is fat enough for me. I do know it is hard to find a business that is as good. I don't know if I should count on the stock getting to 22x. Moody's went to 30 times. This isn't Moody's.

The earnings are a reasonable target, but not a safe bet. Obviously, that is the beginning of a thesis, and I will have an opportunity to look at the spin-off-AEFA later.

A complicated business with a lot of moving pieces. Most of the time I do this, I skip it because there are questions I can't answer and I need to make certain metrics. I don't want to skip AXP because this is a good business. I will also discuss option situations.

AEFA reported numbers: \$300 profit per client that they have. 2.5 million Clients $\mathrm{x} \$ 300$ net income per client-what is this worth to someone else? The list of companies with $\$ 50$ million to buy AEFA is short. Generally, that is a good thing to look at. Look at the takeover value to someone else. You would have to pay a full price.
$A E F A$ is a potentially poorly, under-managed firm. How much do they have under management, is it relatively cheap from that stand point.

Student: What kind of time frame do you give yourself?
Joel: As soon as I finish my work, I move. This situation has a lot of stock out there. I don't think there will be a lot of competition because it is not the cheapest thing I have ever seen. My general rule is I am not a trader, so I take a position if the opportunity is there. I am good at valuing businesses but not trading them. I have never met anyone who has made a living trading.

If you can value businesses and are very disciplined, then that is the main strategy.

Joel as Buffett

## Joel will play Warren Buffett. Any questions you have for Warren?

I want a business earning good returns on capital. I want good managers but if I have mediocre managers in a great business, I may ask for a bigger discount. In two or three years out, the market will eventually get it right-value the business correctly and the price gap will close.

I do have people that work with me who go out and visit management. I am more of a numbers guy, but I look at the actions of management over a long time period.

I am always looking for a big enough margin of safety in case I am wrong, I will still make money.
My biggest position now, which I will not name, gets huge ROC and has a big shareholder in it. They plow their earnings back into buying stock. We are confident that they will continue to do that. There is a moat around the business. We will have five or six things that are $80 \%$ of the portfolio.

I started as a cigar butt investor with net/nets. Graham said that if the business is selling below net liquid assets, then on average you will do well. Berkshire Hathaway was a textile manufacturer which was earning low ROC, but he bought it below liquid assts. However, if the business is dissipating capital, then the liquidating value will decline. Unless you liquidate the business, you are stuck with a poor business that is losing value.

That is why you should not buy a business with poor economics. He now would rather pay $\$ 8$ for a business worth $\$ 10$ that is growing to $\$ 12$ instead of paying $\$ 6$ worth $\$ 10$ that is going down to $\$ 8$.

## PORTFOLIO MANAGEMENT

Buffett ignores Beta. Risk is permanent loss of capital. I don't care if the price goes down for $A X P$, if I can get back to normalized earnings. If we are at peak earnings, then I would be worried about reaching normalized earnings.

I look at risk/reward. If I am wrong and $A X P$ is $\$ 80$ and the stock is $\$ 55$ now. There is a lot of room between $\$ 55$ and $\$ 80$ or $\$ 35$ to make money.

I am concentrated but not leveraged. Walk into a town and buy the best businesses you can find. Pick five good business at decent prices and put $20 \%$ in each. Instead of indexing by putting money in all the businesses in town. If one or two businesses doesn't work out, but the other two or three do very well. Volatility is a stupid metric. If you have a three to five year horizon at a minimum, you will do OK.

I have missed some huge things--\$2 to $\$ 12$ to $\$ 0$. I got out at $\$ 1.00$ so I only lost half my money. Some years I lose $5 \%$ and other years I make $100 \%$. Look for asymmetric rewards. With $A X P$, I am betting $\$ 0$ or $\$ 5$ (whatever is my cost of carry) at $\$ 55$ and have expected upside of $\$ 30$ or $50 \%--\$ 5$ down and $\$ 25$ up or 5 to 1 return. If I feel confident of my valuation, and the business does well so how the business bounces around just ignore it. But if you are in a 3 to 5 year horizon then you are in good shape.

Once again, Buffett has huge amounts of capital, so his universe is much smaller. He must hold for a long period of time. He has a more limited universe in which to pick from than you. There are more opportunities to find the unknown when you are smaller.

My favorite period is forever, but he did say he wished he had sold Coke when it was worth 2.5 times its worth. I may sell 80 cent dollars to buy 50 cent dollars. That doesn't happen to Buffett now.

Buffett has advantages operating an insurance company in Omaha, NE because he can invest in equities. If you don't have the balance sheet and the confidence to not worry about volatility.

## Coke (KO):



I will see you March $2^{\text {nd. }}$ Look at the spin-offs in the sheet I gave you.

END

## Greenblatt Class \#6

March 16, 2005

## LEAPS:

## Joel’s Option Trading Days at Bear Stearns

Options were not as efficient back then as they are now. If I could create a situation if our borrowing cost was $10 \%$ and make $12 \%-$-it was a risk-less spread at $2 \%$. I was doing forward conversions.
$+$

I spent the whole summer trading options.
Another way to look at a Call is it is similar to owning 100 shares and 1 put. 100 shares of stock and 1 put (1 put has 100 shares). The put price is expressed on a per share basis. A put price of $\$ 3.70$ costs $\$ 370$.

The equivalent of owning a Call is like buying a stock and a put. Why is that? Once I own a put at $\$ 50$ strike price, I can't lose money below $\$ 50$. I have to lay out $\$ \$$ for the interest cost of owning the stock at $\$ 50$. That is the same as owning the Call at $\$ 9$. The economics are exactly the same other than the interest difference.

Dividend Issue: You have to adjust for dividends because if you own the stock you are getting dividends and if you own the Call you are not getting dividends.

The Call gives you the right to own stock at $\$ 50$ and the right not to lose money below $\$ 50$. So here I own the stock and I bought the put.

So what I was doing all summer at Bear Stearns was to buy the stock and a put while selling the Call --and make money. I was executing forward conversions.

If I bought the stock at $\$ 50$ and the put at $\$ 3.70$ (identical to owning a Call) and I sell the Call at $\$ 9-$-this is an arbitrage.

I bought the stock at $\$ 56.65$ and sold a Call for 9.00 which will expire Jan. 07.

## Arbitrage or Forward Conversions

If the stock is at $\$ 60$ or above.
So whole position is $\$ 56.55$ and $\$ 60=\$ 3.45$ and I have the cost of laying out the $\$ 56.55$ for two years. $\$ 3.45$ in interest for two years. If I put this down $\$ 56.55$ minus $\$ 9$ (Call) $=\$ 47.55$ is the cost of the trade. Now, I own a stock and I own a put and I sold a Call. The stock is at $\$ 60$. How much is this $\$ 47.55$ worth with the stock is at $\$ 60$ ?

I laid out $\$ 47.55$ and I get $\$ 50$ two years later.
If the stock is at $\$ 40$ or below.
What happens if the stock is at $\$ 40$ at expiration? Own the stock at $\$ 40$ and a put that is worth $\$ 10$ (put stock at $\$ 50$ when the stock is trading at $\$ 40$ for a difference of $\$ 10$ ). The Call is worth $\$ 0$.

What if the stock is at $\$ 50$, the trade is worth $\$ 50$. Because the put and the Call are worthless and I own the stock at $\$ 50$.

I put trade on at $\$ 47.55$ I collect $\$ 50$ no matter what happens to the stock price. The difference is $\$ 2.45$, so the cost is $\$ 2.45 / \$ 47.55=5.2 \%$ and annualized over two years is $2.7 \%$. This rate equates to the risk-free rate for the amount of time of the trade.

Gee, if I (a trader at Bear Stearns) could borrow money at 3\% and I can make 5\%, it is risk-less.

## The key is thinking of buying a call as the same thing as buying a stock with a put attached.

There is no difference. When you are investing, you want to know what you are doing.
When I buy a Leap, I am basically buying a stock with protection. The difference in any price has to do with dividends and any interest that is paid out, but it is fairly priced. It is a cheap way to borrow money. The implied borrowing costs in the Call will really be the risk free rate. You will be borrowing close to the riskfree rate.

The volatility will come into what is the put worth? If the stock can vary widely, then the put won't be priced so cheaply.

Don't worry about volatility or any complicated stuff. Remember that when you buy a Call--you are buying a stock and a put (protection).

## The fundamentals regarding American Express (AXP).

## Constructing a thesis.

In Sept. 2005, they will spin off the financial advisory business. An analyst said it would earn 56 cents and he gave it a 16 multiple, so it is worth $\$ 8$ or $\$ 9$. Let's say it is at $\$ 9$, so you are buying the other business (which I am interested in) at $\$ 43.85$.

Let's construct a thesis for $A X P$. Analyst estimates were roughly $\$ 2.50$ for this year. The company is telling you that they will grow earnings at $12 \%$ to $15 \%$ per year. This works out to $\$ 3.20$ in earnings per share in 2007. Since the options expire in two years, in Jan 2007 what is the multiple of earnings in 2007?

The question now is: are loss ratios in credit cards lower than normal or are their spreads larger than normal? Are they making more than normal profits? Or is this situation now normal earnings? We can quibble if this $\$ 3.20$ EPS could turn into $\$ 3$. I will argue that it will be $\$ 3.20$.

When we went to analyze this thing--and this excludes the American Express Bank which earns about a $\$ 0.10$ and is not a high multiple business--so I give that a $\$ 1$ at the end of the day.

So the question is what is that $\$ 3.20$ worth? Remember when the 20 year govt. bond is below $6 \%$, we will use $6 \%$ as a safety net, then we compare our investment in $A X P$ to this. What multiple should we place on the $\$ 3.20$ ? This is a pretty good business. Actually when they suck out money from spinning off the financial advisors, they won't have to spend money anymore on that division, their returns on equity will approach $40 \%$ at that time. Not quite Moody's or not quite Coke--but a good business. There are no natural barriers to entry. Amex will grow with the economy. AXP has unending growth as long as the economy grows. There is no natural end to their business. As long as the financial world grows and Moody's can retain share, Moody's will grow.

They can do stock repurchases or through dividends--last year they returned $87 \%$ of cash through buybacks and dividends. That reminded me of a Coke/Moody's type of situation. Moody's could return $100 \%$ of their capital and still grow while Coke could do the same with $80 \%$ of their capital. Coke needed to reinvest $20 \%$ in their business to grow. I am thinking they (AXP) are saying $65 \%$ and they are paying out $87 \%$ while they could do $75 \%$ or $80 \%$ in the future. This is a decent multiple business. The question is how much of a multiple and that is more art than science at this point.

Having seen a lot of things, would I rather have a $5 \%$ on AXP earnings that it is growing $12 \%$ to $15 \%$ or a $6 \%$ bond. I would rather have the $5 \%$.

A conservative P/E of $22 \times \$ 3.20$ in $2007=\$ 70.40$
Then we have $\$ 1$ from the bank. Then we have $\$ 9$ from the spin-off.
The spin-off is supposed to happen in Sept. 2005. But we are buying options for Jan 2007. So what happens to my options with the two separate companies post spin-off? You get both of those companies--the right to buy the spin-off and AXP at \$50. If you buy the \$50 Call you get each share.

Which risk/reward do I like better? I value it $\$ 9$ in two years. To spend to get to this earnings growth of \$3.20 in two years you will collect dividends and buybacks. Add another $\$ 2$. $\$ 82.40$ in two years. The Jan 07 Calls bought at $\$ 9.00$ are worth $\$ 32.40$ (\$82.40 - \$50.00).

If you own the stock at $\$ 52.40$ and sell in two years at $\$ 82.40$. So you make $\$ 30$ or $55 \%$ return over two years or $25 \%$ annualized. The options you will make $300 \%$.

At $\$ 70$ then you would make $14.5 \%$ a year, but the options would be worth $\$ 20$ or a profit of $\$ 11$ or $100 \%$ return.

The market turns down and the market will not pay a multiple. You have to include your interest carry.
Do a decision tree, but I give it a $30 \%$ chance of it being worth $\$ 30$ and I give it a $20 \%$ of being worth $\$ 70$ and give it a $25 \%$ of being $\$ 60$ or $25 \%$ for $\$ 50$. An expected value of $\$ 20$ for these $\$ 9.00$ Calls.

You would not buy as much of these Calls as a stock, but it gives you an opportunity to get more leverage and a greater risk/reward. With the stock you don't know your risk reward exactly--the stock could be at $\$ 30$.

Here with options you know your loss is no more than $\$ 9.00$. Buying a stock and buying a put is the only difference.

The way I choose to look at a LEAP - owning a LEAP is buying the stock and owning the put. What is the difference between interest cost in laying out the $\$ 52$ or paying the interest cost of the $\$ 9$ Call? Here I am paying $\$ 6.15$ above the intrinsic value of the Call. Look I am paying $\$ 6.15$ in interest over 22 months to borrow $\$ 52.85$ and $\$ 9$. Or........ $\$ 61.85$ or $4.8 \%$ per year.

I am paying $\$ 6.15$, which is $14 \%$ cost of money over two years ( $14 \% / 2=7 \%$ ). So my effective borrowing cost is $7 \%$. So instead of saying I am borrowing money at the risk free rate and buying a put to get my LEAP. What I am saying is forget the put. Let us add the cost of the put to my interest cost.

The difference between my buying this stock and this LEAP is that today--instead of laying out $\$ 52.85$ today and paying the interest on that--I am paying an additional $\$ 6.15$ (all interest). And what I get in exchange for the put and my effective borrowing cost is not $3 \%$ per year but $7 \%$ per year. So I get to borrow at 7\%, but I can't lose any more money than this. I am basically borrowing at 7\% but I have a non- recourse loan. In other words, if it doesn't work out, I owe the interest, but I don't have to pay the loan back.

In effect, I buy the put. I say look, they are lending me money at 7\%, but I have to pay the interest no matter what, but if things don't work out, I don't have to pay the loan back. That sounds like a better deal. You pay high interest rates but you don't owe the loan.

## Reread the chapter on LEAPS.

You pay your interest costs up front. You are paying the difference between the value of what you are buying (all interest)-- what that put is giving you is a non-recourse loan-- and my interest rate instead of being the risk free rate of $3 \%$, I pay $7 \%$. Say I put $8 \%$ of my portfolio into these leaps. I judge by how much I am wiling to lose. $8 \%$ over two years or $4 \%$ a year. I won't lose it all at once.

Listen, if I have these opportunities and they don't come along very much, I will try to take as much as I can of them. And I think if I did this and my expected value is $\$ 20$ and I am any good at this at handicapping horses then if I do 6 or 8 or 10 of these and I have a horizon of five years and my expected value is $100 \%$ over what I am paying, then I can afford to lose a few--as long as I am good at handicapping. I have been doing this awhile.

I would like to know as opposed to buying the stock at $\$ 52.85$ and when the stock goes to $\$ 70$ and I make x percent with whatever implicit risk reward is there. Or can I take my bet this way or could I take partial stock and partial leaps. It is a different risk/reward. It is a different alternative that is worth working at.

I don't know if I am right, but I think if I looked at 10 of these, I would get 8 of them right or 7 of them right. There is a case for $25 \mathrm{P} / \mathrm{E}$ for AXP.

I am comparing the 6 bond yield to the opportunity. I might use 14 or the economy turns down and the consumer drops dead besides bad credit and loss reserves. You can't lose more than $\$ 9$. In my leaps I would lose some of my $7 \%$ interest a year and won't have a stock loss. That is the way I choose to look at it.

## BULL SPREAD

There is another choice in options. You don't want to be as aggressive. You bought these 50 's at 9 and sell the 55 s for $\$ 6.20$ for a net $\$ 2.80$ cost. The stock is worth $\$ 55$ so the 50 Call is worth 55 or $\$ 5$ and the Call at 55 expires worthless. Profit is $\$ 5+\$ 6.20-\$ 9$ or $\$ 11.20-\$ 9=\$ 2.20$. In short, you laid out $\$ 2.80$ to make $\$ 2.20$ net profit for a $79 \%$ return on your capital. The spread you paid $\$ 2.80$ for you will make $\$ 5$ on any stock price above $\$ 55$. Your break-even is at $\$ 52.80$. So you can create all sorts of interesting risk reward situations even if the stock doesn't go very far. There a lot of things you can do to with options to create interesting risk/reward situations.

## SEARS

There was a lecture on Sears. Dean Witter (DW) and Allstate spun-off. The deal was announced in Sept. and Michael Price said in July--Sears is spinning off Sears and Allstate. Once they spin off All State and DW, by buying Sears and shorting those two companies, you could create the rest of Sears the department store for \$35 per share. The department had $\$ 9$ per share in sales. It was trading at $6 \%$ of sales (5/90). When we looked at JC Penny, it was trading at 60 cents per dollar of sales--10 times higher. That $\$ 5$ you could create Sears for $\$ 5$ and it was worth $\$ 50$. By Sept. the $\$ 5$ had moved to $\$ 30$, then I sold my stock. Then the stock moved to $\$ 50$.

Here we have the catalyst; it is not just a LEAP--that is the thesis anyway. There is a spin-off coming in Sept. Once the subsidiary is spun off, people will have a new company too look at. Things will be reassessed. What are the attributes of that company? You say it doesn't work that way, but Sears was pretty darn big. I can guarantee you I have done this many, many times since that time. And so stuff happens. It may not make a ton of sense. This (AXP) may not work out.

## With Leaps you can create a very exciting risk reward play if you have a strong opinion, and you are right. It is a nice weapon to have in your arsenal.

Discussion of LEAPS in Book, You Can Be a Stock Market Genius by Joel Greenblatt (pgs: 213-220, 236, and 242).

## LEAPS (Long-term Equity Anticipation Securities).

This is a way to create your own version of a stub stock. A situation that has many of the risk/reward characteristics of an investment in the leveraged equity of a recapitalized company.

A Call is merely the right, but not the obligation--to buy a stock at a specified price for a limited period of time. A June Call to buy IBM at $\$ 140$ per share gives the owner of the Call the right to buy IBM at $\$ 140$ per share until the Call expires in June. Let's assume that IBM is trading at $\$ 148$ in April, two months prior to June expiration. In April, these Calls are worth more than the intrinsic value of \$8 (148 price - $\$ 140$ Strike Price). They're more likely to be trading closer to $\$ 11.375$.

Why? First, the owner of the Calls doesn't have to lay out $\$ 140$ for another two months, yet he is entitled to all of the stock's appreciation until June. To compensate for this, the amount of interest that could have been earned on the $\$ 140$ for the two months until expiration should be reflected in the price of the Call. This is Called imputed interest rate which is the rate for the amount of money the Call buyer didn't have to lay out for the two months is also included in the Call price.

That is how we move the from a Call price of $\$ 8$--the intrinsic value of the Call--to approximately $\$ 9.40$--the value of the Call including the interest on the $\$ 140$ the buyer of the Call did not have to lay out. But I said the Call should trade at approximately at $\$ 11.375$. What accounts for the nearly $\$ 2$ difference between the $\$ 9.40$ already figured and the actual price of $\$ 11.375$ ? Clearly there has to be another benefit to owning Calls--and there is.
The buyer for the Call can only lose the amount of money invested in the Call. If IBM falls to $\$ 80$ per share, the Call buyer only loses $\$ 11.375$ while the owner of IBM at $\$ 140$ would lose $\$ 60$. This is probably worth about $\$ 2$. So, if you pay the $\$ 2$ in "protection money" as part of the purchase price of the Calls, then your cost of $\$ 9.40$ moves closer to $\$ 11.375$. The $\$ 2$ cost for assuming the risk below $\$ 140$ is actually the same as the cost of the put option.

## Buying calls is like borrowing money to buy stock, but with protection.

The price of the Call includes your borrowing costs and the cost of your "protection"--so you are not getting anything for free, but you are leveraging your bet on the future performance of a particular stock. You are also limiting the amount you can lose on the bet to the price of the Call.

Owning a Call isn't too much different from owning a stub stock.
STUB EXAMPLE: The company with a $\$ 36$ stock recapitalized by distributing $\$ 30$ to its shareholders, the result was a leveraged stub stock at $\$ 6$ that magnified changes in the value of the underlying company. There,
a relatively modest 20-percent increase in earnings resulted, in one scenario, in an 80-percent gain on the stub stock's price.

On the other hand, if the company declared bankruptcy, an owner of the stub stock was only at risk for the amount invested in the stub, not for the $\$ 30$ of debt taken on by the company to complete the recap. Stubs have unlimited life unlike options which have expiration dates.

LEAPS, which are long-term options, can be purchased up to two and a half years before they expire. Additionally, two and a half years is often enough time for many just plain cheap stocks either to be discovered or regain popularity. Long-term gains are another advantage of holding investments past one year.

Investing in LEAPS will come about as a by-product of your research efforts. Being able to compare the risk/reward of a stock with the opportunities available through an investment in the related LEAPS will provide you with another good investment choice.

## END

MONDAY, JUNE 8, 1998
Dangerous Games
Did "Chainsaw Al" Dunlap manufacture Sunbeam's earnings last year?
By JONATHAN R. LAING

Albert Dunlap likes to tell how confidants warned him in 1996 that taking the top job at the small-appliance maker Sunbeam Corp. would likely be his Vietnam. For a time, the 60 -year-old West Point graduate seemingly proved the Cassandras wrong. As the poster boy of 'Nineties-style corporate cost-cutting, he delivered exactly the huge body counts and punishing air strikes that Wall Street loved. He dumped half of Sunbeam's 12,000 employees by either laying them off or selling the operations where they worked. In all, he shuttered or sold about 80 of Sunbeam's 114 plants, offices and warehouses.

Sunbeam's sales and earnings responded, and so did its stock price, rising from $\$ 12.50$ a share the day Dunlap took over in July 1996 to a high of 53 in early March of this year.

But last month Sunbeam suffered a reversal of fortune that was as sudden and traumatic for Dunlap as the Viet Congo's Tat offensive was to U.S. forces in 1968. After several mild warnings of a possible revenue disappointment, Sunbeam shocked Wall Street by reporting a loss of $\$ 44.6$ million for the first quarter on a sales decline of $3.6 \%$. In a trice, the Sunbeam cost-cutting story was dead, along with "Chainsaw Al" Dunlap's image as the supreme maximize of shareholder value. Now Sunbeam stock has fallen more than $50 \%$ from its peak, to a recent 22.

And just as suddenly, what was supposed to be an easy sprint, Dunlap's last hurrah as a corporate turnaround artist, has turned into a grinding marathon. Lying in tatters is his growth scenario for Sunbeam, based on supposedly sexy new offerings such as soft-ice cream makers, fancy grills, home water purifiers and air-filter appliances. Many of the new products have bombed in the marketplace or run into serious quality problems. Moreover, Sunbeam has run into all manner of production, quality and delivery problems. It recently announced the closing of two Mexican manufacturing facilities with some 2,800 workers, citing the facilities' lamentable performance. Dozens of key executives, members of what Dunlap just months ago called his Dream Team, are bailing out. And now he faces another year or more of the wrenching restructuring that's needed to meld Sunbeam with its recently announced acquisitions, including the campingequipment maker Coleman Co., the smoke-detector producer First Alert and Signature Brands USA, best known for its Mr. Coffee line of appliances. These acquisitions will double the size of a company whose wheels are coming off. This may not be Vietnam, but it sure isn't Kansas, Toto.

Sunbeam declined to discuss the company's problems with Barron's. In some ways, Dunlap seems to have morphed into a latter-day Colonel Kurtz of the movie Apocalypse Now, increasingly out of touch with the grim realities of Sunbeam's situation and suspicious of friend and foe alike. For example, Wall Street is still buzzing over a confrontation that Dunlap had with PaineWebber analyst Andrew Shore at a Sunbeam meeting with the financial community in New York three weeks ago. Shore had the temerity to ask several questions that Dunlap deemed impertinent, and Dunlap snarled, "You son
of a bitch. If you want to come after me, I'll come after you twice as hard."

Shore, the first major analyst to downgrade Sunbeam's stock in April when word began to circulate of a possible firstquarter earnings debacle, is still upset over the incident. "As far as I'm concerned, Al is the most over-rated CEO in America," he grouses. "He's nothing but a bully who speaks in sound bites and completely lacks substance."

Despite Sunbeam's latest reversal of fortune, don't expect Al Dunlap to be headed for the poorhouse any time soon. Though the swoon in Sunbeam shares has vaporized the value of the options held by most of the company's executives and managers, Dunlap's huge option and stock grants are still worth about $\$ 70$ million, down from a peak value of over $\$ 300$ million when the stock was at its high. Moreover, in February Dunlap negotiated a new contract, doubling his annual base salary to $\$ 2$ million. Under a rich benefits package, Sunbeam even foots the bill for Dunlap and his wife's first-class air fare from Florida, where Sunbeam is headquartered, to Philadelphia so that Dunlap can visit his personal dentist to keep his latest bridge comfy and pearly white. Limo charges and overnights at the Four Seasons hotel are included as well. All this from the self-styled champion of shareholder value.

We can't say we are surprised by Sunbeam's current woes. In a cover story last year entitled "Careful, Al" (June 16), we cast a skeptical eye at Dunlap's growth objectives in the low-margin, cutthroat small-appliance industry. We also pointed out the yawning gap between Sunbeam's performance claims and reality. We took special note of Sunbeam's accounting gimmickry, which appeared to have transmogrified through accounting wizardry the company's monster 1996 restructuring charge (\$337 million before taxes) into 1997's eye-popping sales and earnings rebound. But to no avail. Wall Street remained impressed by Sunbeam's earnings, and the stock continued to rise from a price of 37 at the time of the story.

Sunbeam's financials under Dunlap look like an exercise in high-energy physics, in which time and space seem to fuse and bend. They are a veritable cloud chamber. Income and costs move almost imperceptibly back and forth between the income statement and balance sheet like charged ions, whose vapor trail has long since dissipated by the end of any quarter, when results are reported. There are also some signs of other accounting shenanigans and puffery, including sales and related profits booked in periods before the goods were actually shipped or payment received. Booking sales and earnings in advance can comply with accounting regulations under certain strict circumstances.
"We had an amazing year," Dunlap crowed in Sunbeam's recently released 1997 annual report, taking an impromptu victory lap for the profit of $\$ 109.4$ million, or $\$ 1.41$ a share, on sales of $\$ 1.2$ billion. Sunbeam had every incentive to try to shoot the lights out in 1997. Dunlap and crew were convinced they would be able to attract a buyer for the company just as they had done in the second year of their restructuring of Scott Paper in 1995, when Dunlap managed to fob Scott off on Kimberly-Clark for $\$ 9$ billion. They openly shopped Sunbeam around in the second half of last year, but the offer never came. The rising stock price made the company too expensive, and would-be buyers were also deterred by the nightmares Kimberly-Clark experienced after buying Scott.

Yet, sad to say, the earnings from Sunbeam's supposed breakthrough year appear to be largely manufactured. That, at least, is our conclusion after close perusal of the company's recently released $10-\mathrm{K}$, with a little help from some people close to the company.

Start with the fact that in the 1996 restructuring, Sunbeam chose to write down to zero some $\$ 90$ million of its inventory for product lines being discontinued and other perfectly good items. Even if Sunbeam realized just 50 cents on the dollar by selling these goods in 1997 (in some cases, they reportedly did even better), that would account for about a third of last year's net income of $\$ 109.4$ million.

One has to go to the 1997 year-end balance sheet to detect more of mother's little helpers. One notes a striking \$23.2 million drop, from $\$ 40.4$ million in 1996 to $\$ 17.2$ million in 1997, in pre-paid expenses and other current assets. There's no mystery here, according to a former Sunbeam financial type. The huge restructuring charge in 1996 made it a lost year anyway, so Sunbeam pre-paid everything it could, ranging from advertising and packaging costs to insurance premiums and various inventory expenses. The result: Costs expensed for 1997 were reduced markedly, if unnaturally. This artifice alone probably yielded an additional $\$ 15$ million or so in 1997 after-tax income.

Why did Sunbeam's "Other Current Liabilities" mysteriously drop by $\$ 18.1$ million and "Other Long-Term Liabilities" fall
by $\$ 19$ million in 1997? The answer is simple, according to folks close to the company. Various reserves for product warranties and other items that were set aside during Sunbeam's giant 1996 restructuring were drained down in 1997, creating perhaps an additional $\$ 25$ million or so in additional net income for the year.

On top of all that, as part of the 1996 restructuring charge, Sunbeam reduced the value of its property, plant, equipment and trademarks by $\$ 92$ million. Though some of these charges applied to assets Sunbeam was selling off, the bulk of the charge related to ongoing operations. This allowed Sunbeam to lower its depreciation and amortization expense on the 1997 income statement by nearly $\$ 9$ million. That would create about $\$ 6$ million of additional after-tax income.

Oddly enough, the figure for net property, plant and equipment on Sunbeam's balance sheet still rose during 1997, to \$241 million from $\$ 220$ million the year before. This is likely an indication that such costs as product development, new packaging and some advertising and marketing initiatives were capitalized or put straight on the balance sheet instead of being expensed in the year they were incurred, as was the previous practice. In this manner, expenses could have been shifted from 1997 into future years, when they can be burned off at a slower, more decorous pace afforded by multi-year depreciation schedules. Why else would Sunbeam's advertising and promotion expense drop by some $\$ 15$ million, from $\$ 71.5$ million in 1996 to $\$ 56.4$ million last year? Particularly when Sunbeam trotted out a splashy national television ad campaign in 1997 to boost consumer demand for its new products. This advertising shortfall alone contributed another $\$ 10$ million to Sunbeam's 1997 profits.

The company also got a nice boost from a $64 \%$ drop in its allowance for doubtful accounts and cash discounts, from $\$ 23.4$ million in 1996 to $\$ 8.4$ million in 1997. And this decline occurred despite a $19 \%$ rise in Sunbeam's sales last year. The milking of this bad debt reserve in 1997 likely puffed net income by an additional $\$ 10$ million or so.

Then there's the mystery of why Sunbeam's inventories exploded by some $40 \%$, or $\$ 93$ million, during 1997. Quite possibly, Sunbeam was playing games with its inventories to help the income statement. By running plants flat out and building inventories, a company can shift fixed overhead costs from the income statement to the balance sheet where they remain ensconced as part of the value of the inventory until such time as the inventory is sold. To be conservative, let's assume this inventory buildup might have helped Sunbeam's profits to the tune of, say, $\$ 10$ million.

Lastly, there are more than superficial indications that Sunbeam jammed as many sales as it could into 1997 to pump both the top and bottom lines. The revenue games began innocently enough early last year. Sales were apparently delayed in late 1996, a lost year anyway, and rammed into 1997. Likewise, The Wall Street Journal reported several instances of "inventory stuffing" during 1997, in which Sunbeam either sent more goods than had been ordered by customers or shipped goods even after an order had been canceled. But these are comparatively venial sins that companies engage in all the time to make a quarter's results look better. Besides, Sunbeam gave the plausible excuse at the time that glitches in a computer system consolidation in the first quarter had them flying blind for a time.

But as 1997 dragged on and the pressure to perform for Wall Street intensified, Sunbeam began to take greater and greater liberties with sales terms to puff current results. The latest $10-\mathrm{K}$, for example, discloses that in the fourth quarter of last year Sunbeam recorded some $\$ 50$ million in sales of cooking grills under an "early buy" program that allowed retailers to delay payment for the items as long as six months. Moreover, some $\$ 35$ million of these "early buys" were categorized "bill and hold" sales and never even left Sunbeam's warehouses.

Sunbeam engaged in bill-and-hold transactions in other product lines, too, according to a number of people in the appliance industry. In the second quarter, for example, Sunbeam booked a sale and "shipped" some $\$ 10$ million of blankets to a warehouse it had rented in Mississippi near its Hattiesburg distribution center. They were held there for some weeks for Wal-Mart . The company also pumped millions of dollars of goods into several national small-appliance distributors on such easy payment terms as to call into question whether a sale ever took place. Some with knowledge of Sunbeam's business practices say the appliance maker in some instances transferred title for the goods to distributors but then agreed to not only delay payment but actually pay the distributors what amounted to a storage charge for taking the goods. These sources also said that in some cases distributors also had the right to return the items to Sunbeam without suffering any loss.

How much did various types of questionable sales add to 1997's net income? No outsider can know for sure. But we can make an educated guess based on the fact that Sunbeam's receivables, or unpaid customer accounts, jumped by $38 \%$, or
$\$ 82$ million, in 1997. Taking into account Sunbeam's profit margins, it seems that questionable sales could have boosted 1997 net income by as much as $\$ 8$ million.

We by no means are privy to all Sunbeam's techniques for harvesting current earnings from past restructuring charges and future sales. Deconstructing Al Dunlap is a daunting task. But to save our gentle readers the effort, our total estimate of artificial profit boosters in 1997 came to around $\$ 120$ million compared with the $\$ 109.4$ million profit the company actually reported. Thus, one is left to wonder whether Sunbeam made anything at all from its actual operations, despite Dunlap's claim to have realized some $\$ 225$ million in cost savings as a result of his restructuring prowess.

Our dour view of Sunbeam's current financial health is only confirmed by the company's consolidated statement of cash flow in the latest $10-\mathrm{K}$. These numbers, of course, are harder to finesse because they track the actual cash that flowed in and out of the company during 1997. And the statement doesn't paint a pretty picture. Despite 1997's eye-catching \$109.4 million net profit, Sunbeam still suffered negative cash flow from operations of $\$ 8.2$ million, after taking into account the explosion in Sunbeam's inventory and accounts receivable during the year. And that operating cash flow deficit would have been an even larger $\$ 67.2$ million if not for the sale of $\$ 59$ million in receivables in the last week of 1997. After capital expenditures of $\$ 58.3$ million is thrown into the equation, Sunbeam's free cash flow deficit amounts to more than \$125 million.

Sunbeam's first-quarter earnings debacle is yet another sign of a company that's in anything but the pink of health. Despite management assertions into April that Sunbeam's first-quarter sales would finish comfortably ahead of those for the first quarter of 1997, they ended up declining $4 \%$. Even more shocking to Dunlap's fans was the $\$ 44.6$ million loss in the March quarter compared with a profit in the year-earlier period of $\$ 6.9$ million. Sure, $\$ 36.8$ million of that first-quarter loss was the result of nonrecurring charges, mostly a handsome new pay package Dunlap managed to negotiate in February. But the operating loss Sunbeam suffered of $\$ 7.8$ million was a clear sign of its true earnings power once the tank from the 1996 restructuring charge had run dry.

Dunlap trotted out a whole raft of excuses for the company's lamentable first-quarter performance. He cited dumb deals his former No. 3 executive had made with major retailers before Chainsaw fired him in April, the effect of bad weather on grill sales caused by El Nino, and so forth.

Whatever the case, the first-quarter disaster wasn't the result of any lack of effort on Sunbeam's part to pump up the results. The company recorded $\$ 29$ million of additional "buy now, pay later" grill sales. In fact, the company is now holding so many grills in various warehouses around its Neosho, Missouri, grill plant that it has had to lease warehouse space in nearby Oklahoma. Who knows how many of these grills will ever make it to the selling floor?

Sunbeam also extended its quarter by three days, from March 28 to March 31. This allowed the company to book an extra $\$ 20$ million in sales both from ongoing Sunbeam operations and two days of sales from Coleman (its acquisition closed on March 30). But to no avail. Sunbeam still fell $\$ 9$ million short of last year's sales of $\$ 253.5$ million.

Reports are rife that Sunbeam tried to strong-arm suppliers into "rebutting" their invoices for various goods and services so that Sunbeam would officially owe less money. The proviso was that the suppliers would be allowed to add back the amount forgone, plus interest, in invoices submitted after the first quarter had ended. A Sunbeam financial official denies the "rebutting" charge and characterizes the activity by the company's procurement department as the normal give-andtake that goes on between suppliers and companies seeking rebates.

But that's not the understanding held by an official at one China-based supplier. When contacted by Barron's, this official readily acknowledged that he had sent Sunbeam a check for $\$ 500,000$, or $5 \%$ of the business he does annually with the company, in late March. "The only reason I sent them a check rather than a new invoice is that we had no invoices outstanding at the time we received the call," he explained. "We figure our contribution dropped right down to the bottom line if Sunbeam actually booked it. I don't know what happened, though."

For the next few quarters, expect the recent acquisition of Coleman, First Alert and Mr. Coffee to restore a measure of calm to Sunbeam's financial performance. The giant restructuring charges that Sunbeam is taking to integrate the new units, at $\$ 390$ million before taxes, will give the company plenty of fodder with which to play earnings games. The
company is even forecasting earnings of $\$ 1$ a share this year and $\$ 2$ next year -- before extraordinary items, naturally.

But Dunlap's days at Sunbeam may be numbered. The already-ailing company now has to struggle under $\$ 2$ billion of additional debt and a negative tangible net worth of $\$ 800$ million. And his enemies, including disenchanted shareholders, angry securities analysts, and bitter former employees, are growing in number and circling ever closer to the company's headquarters in Delray Beach. Of course, Dunlap could always escape by using the building's flat roof to chopper out, should it come to that. One can only hope he'll remember to take the American flag with him.

## Greenblatt Class \#7

March 30, 2005

## Buying MCO at 21x Forward Earnings or How We Learned from Buffett's Purchase of Coca-Cola

## Notes: John Chew

## Professor Joel Greenblatt Introduction:

Presentation by Robert Goldstein, my partner from Gotham Partners. He has been with me for the last 15 or 16 years. He is a brilliant investor.

He will talk about how we are value investors but we also are paying a lot more than we were accustomed for some company. Redefining value based on what it is worth rather than low price/book or low P/E. And it sort of opens up a similar discussion to what we talked about with Amex to some degree. It is sort of another tool/arrow in your quiver or in your arsenal. To pay a decent price for a good company. You do not have to go through life doing that. I think it is harder to do, because you have less room for error. If you are going to pay up, you better understand the business and know why it should be worth more. It is hard to do because you can screw up. This example certainly shows how important returns on capital are when you are trying to figure out a fair multiple for that earnings stream.

Summary: Return on Invested Capital is key, but what multiple is fair? There is less room for error in buying great businesses since you must really understand the business.

Rob will go through an analysis of a company where we paid up.
The second half of the class we will go through screening techniques
Robert Goldstein (RG): We were looking at Moody's (MCO) business after it's spin-off from Dun \& Bradstreet, but it was priced at 21x forward earnings. Was the greatness priced in?

To help answer that question we chose to compare our potential purchase of Moody's with Buffett's purchase of Coke. (This is a creative comparison of two companies in separate industries).

Buffett began buying Coke in 1988. Buffett figured out that by buying a great business, he could make a fortune. In 1988, Buffett invested $\$ 650$ million in Coke stock. He paid 15 times trailing earnings. 12 years later he was up 10 times his initial investment. Obviously, he knew what he was doing. The question then is why Coke is a great business? It was growing, it had high returns on capital and it had a very long lasting competitive advantage so five years down the road you are still going to have Coke and its advantages-the same as when you initially bought the company.

To give you a little bit of history: originally Moody's revenue came from bond investors who paid for Moody's ratings. Then the rating industry changed dramatically in the 1970s because the rating companies began to charge issuers as well as investors. And this was a huge deal for Moody's because it meant that rating agencies
had gained so much clout, they could charge companies who wished to issue debt or else they would face higher borrowing costs in the market.

Today Moody's and $S \& P$ both have about $40 \%$ of the rating industry. Frequently companies get ratings from both rating agencies. Since ratings are very important in the capital market, companies issuing debt will get ratings from both companies since these companies do not want to be dependent upon one rating agency.

| MCO's 2000 FY | Revenue Growth Rate | Operating Profit Growth Rate |
| :--- | :---: | :---: |
| Growth rate for 19 years | $15 \%$ | $17 \%$ |
| In 19 years only 1 year of decline in revenue. Very stable. |  |  |

Does past success = future success? Sometimes it does and sometimes it doesn't. MCO's growth rate is phenomenal considering its long time period.

Look at the market share stability. The global public debt market grew rapidly over the past 25 years. Basically what was happening was that there was disintermediation in the debt markets. Banks were doing less lending so companies were moving to issue more debt in the public markets, therefore they needed more ratings. You had more securitizations for mortgage loans, car loans-the financial markets were evolving. The market share had not changed much-it was predominantly Moody's and S\&P. It was our conclusion that MCO's growth was likely to continue. Europe and Asia emergence can provide future growth. Less competitive pressure.

It was easy to understand there would be a lot of future growth and not much competitive pressure. Both rating agencies had to be paid. It was very unlikely someone could enter the business because you need credibility. No matter how profitable the business or fast it was growing, a competitor could not obtain the confidence of the customer's CFO nor enter the market easily. It is like paying the Mafia.

In December 1999, Dun \& Bradstreet announced that they would split into two businesses. $D \& B$ was selling for $\$ 27$ a share and you were going to get $1 / 2$ a share of $M C O$ and we assume in a worse case scenario that one share of $\mathrm{D} \& \mathrm{~B}$ was worth $\$ 15$ so the half share was at $\$ 7.5$ per share. You were effectively paying $\$ 24$ a share. At the time, I expected Moody's to earn $\$ 0.95$ per share in 2000.

Joel Greenblatt: At the time we had no idea where $D \& B$ would trade, so the $\$ 7.50$ we were using was very conservative, so we thought this was a worst case of what we were paying.

| $\boldsymbol{K O}$ | $\boldsymbol{M C O}$ |
| :---: | :---: |
| $6 / 1988$ | $3 / 2000$ |
| Price \$5 | $\$ 20.25$ |
| EPS \$0.33 | $\$ 0.85$ |
| Forward EPS \$0.39 | $\$ 0.95$ |
| Trailing P/E 15 | 24 |
| Forward P/E 13 | 21 |

This meant that at a $\$ 0.95$ EPS we were paying 21x forward earnings. Much more than Buffett paid $\$ 4.5$ to $\$ 5$ for Coke-he paid 13x-15 xs for Coke.

Joel Greenblatt: This was a new animal for us. We had never seen a business (MCO) this good with a 19-year growth rate and no need to reinvest money. So we went back to the Master, Buffett, and picked something (KO) that worked out well for him. So at first blush, if you looked at (the chart), this is what we saw. Were we getting as good a deal as Buffett did buying Coke in 1988? At first blush it does not look that way.

$\boldsymbol{R G}$ : This is how Berkshire did on its investment in Coca-Cola:
Coke returned $80 \%$ of its invested capital return to shareholders and the $\mathrm{P} / \mathrm{E}$ expanded from 13 to $40.1 / 3$ of the gain came from $\mathrm{P} / \mathrm{E}$ expansion.

Warren Buffett paid $\$ 5$ for Coke and in 12 years it went to $\$ 58$ (not including dividends received). Investment at June 2000: \$4.75 in dividends x 6\% rate of return = \$6 in dividends by June of 2000. $\$ 5$ to $\$ 64$ or (\$58+ \$6) in 12 years. Leave taxes out so you get a $23 \%$ CAGR.

His initial outlay of $\$ 5$ turned into $\$ 64$ in 12 years. That brings us to the next question-why did Coke do so well?

Answer: Coke's ROE was high for a very long time.

| COKE's Annual CAGR | $\mathbf{1 0}$ Years | 15 Years |
| :--- | :---: | :---: |
| Unit Care Volume | $7 \%$ | $8 \%$ |
| Revenues | $8.8 \%$ | $6 \%$ |
| Operating Income | $12 \%$ | $9.9 \%$ |
| EPS | $15 \%$ | $11.3 \%$ |

Share buybacks help grow the EPS by 15\% a year. Coke's management invested $20 \%$ of their earnings back into the business to produce that growth and they returned $80 \%$ of each dollar invested in the firm of dividends or share repurchases. That had a lot to do with why the return was so good. In addition, the P/E multiple went from 13 xs to 40 xs-the P/E expansion caused $1 / 3$ of the price gain.

The next 10 years looked good as well due to Coke's competitive advantages of strong brand, distribution, good management and corporate governance. This is in part what made investors pay up for the stock.

Let's go back to MCO for a moment. Our assumptions for growth? MCO's $17 \%$ operating income growth which, despite this high growth rate, was very stable.

Student: You might see a lot of trends within those 19 years_perhaps growth in trailing off in the last year?
$\boldsymbol{R G}$ : Actually the growth was very stable.
Student: Assume no growth and then back into a growth assumption?
RG: There really is no science to it. We assumed $12 \%$ growth rate because many of the factors that drove their growth were still in place. Even though MCO had grown annually at over 17\%, management basically had us lower our growth assumptions to $12 \%$.

We try to pick something (growth assumptions) that we feel comfortable with and we think is very conservative and then see if it still makes sense. Nothing grows for $\mathbf{1 2 \%}$ forever. So we assumed $\mathbf{1 2 \%}$ for the next 5 years to 10 years.

We felt MCO's growth factors were still in place. We try to be very conservative. $12 \%$ growth for 5 to 10 years. Public financial markets growing vs. bank lending. We assumed Asia's market and Europe's market was a source of additional growth opportunities for MCO. This business will grow with global growth.

Capital needs were minimal-no real capital needs. MCO was basically some guys in a room with computers.

## How does MCO's no need for capital to grow figure into how much more we would be willing to pay for MCO?

Coke was growing its operating earnings $12 \%$. Coke sent back $\$ 0.80$ to shareholders for every dollar invested.

MCO could send back $\$ 1$ or more for every dollar invested. $\$ 0.80$ for KO vs. $\$ 1.00$ for MCO returned or 25\% more.

Now we focus on MCO's ROC. It's ROC was infinite because they use almost no capital (chairs, desks and computers).

## How much more could you pay for MCO than Buffett paid for his Coke?

Earnings = Free cash flow with no capex needs. With Coke 20 cents had to be retained in the business so they repaid shareholders through share buybacks and dividends the equivalent of 80 cents of every dollar.

Every $\$ 1$ of MCO is worth $25 \%$ more than Coke's $\$ 1$. Your cash flow as a MCO shareholder will be $25 \%$ higher than Coke's.
For Coke to grow $12 \%$ a year, it has to invest $25 \%$ more than $M C O$. When Coke reports a $\$ 1$ per share in earnings that is really only worth 80 cents to you compared to the dollar you get back from MCO. Down the road when growth slows, so say when growth slows to $5 \%$, with $M C O$ you will still get back $\$ 1$ for each $\$ 1$ invested. With Coke you will get back 90 cents on each dollar. Why would you get 90 cents back when growth slows? Because of less growth capex.

Take a growth rate of $5 \%$ and a $50 \%$ return on capital gets me a $10 \%$ reinvestment rate.
Plug into a formula of growth rate/ROC = reinvestment rate: $5 \% / 50 \%=10 \%$. So that $25 \%$ disparity will shrink to $10 \%$ to $11 \%$ at some point.

Buffett paid 13 times earnings but we are willing to pay $15 \%$ more so $13 x$ multiplied by $1.15=15 x$ earnings for MCO because MCO's earnings are worth $15 \%$ more long term to us.

We can pay 15 times forward earnings to get the same result that Buffett got based on that different ROC which is a long way off from 21x earnings.

MCO came public in September and we looked at it in December. Buffett was a buyer. We still had to understand what we are doing. Buffett won't allow management to be stupid with the shareholder's capital.

Our hurdle for buying companies is much higher than his. We pick and choose other than large caps. 15\% return might be great for him, but our hurdle might be $20 \%$. We did know it was a WEB business with these numbers (a franchise-like business with strong economics and barriers to entry).
$M C O$ is a service business with repeatable business and growth-the key question to answer is repeatability and growth prospects. Good for them not to have to use much capital. The numbers are the numbers. How good are the people and the franchise to keep those numbers growing or stable.

Interest rates were $40 \%$ higher when Buffett bought Coke in 1988. If Buffett paid $40 \%$ more than $\$ 5$, then he would have paid $\$ 7$ per share for Coke. Then he would have earned $20 \%$ CAGR vs. $23 \%$.

Compare a 30 year T-bond yield (9\%) then to now (6\%). Remove the drop in interest rate to adjust performance. P/E as an earnings yield. During 1988 - 2000 Interest rates were higher. This was key because interest rates fell from $9 \%$ to $6 \%$, a $\mathbf{4 0 \%}$ decline. So, in 2000 the future earnings would be worth 40\% more.

If our adjusted P/E is 15 (vs. 13 for Coke because MCO's earnings are worth more) and you multiplied that by 1.4 (because of the lower interest rates now prevailing in 2000) you get 21x. How would Buffett have done? $\$ 5$ to $\$ 46$ (vs. $\$ 64$ ). Knock KO down by $30 \%$ to get a 70 cents dollar.

A 6\% 10-year T-bond. What Pension Funds expect to earn in stock--2\% to 8\%--pick a number.
Buffett's investment rose because of the interest rate drop. So let's take the drop in interest rates out of the equation. Buffett's return drops from $23 \%$ to $20 \%$, now we assume $16 \%$ minimum return. We take $30 \%$ discount to the end result gets you 70 cents on the dollar to $70 \% \times 64=45$.

Part of what you lose in this interest rate environment. Expectations on future stock returns are lower. So if we take our minimum 6 percent bond and say people over time in their pension funds expect to earn $8 \%$ a year. So here Rob said if WEB didn't have the benefit of interest rates falling, he would have returned $20 \%$ a year instead of $23 \%$.

We are paying a premium for what we are paying for $M C O$, so we are not going to assume interest rates will go our way. We will make $16 \%$ a year.

Joel Greenblatt (JG): I look at it this way: let us go three years out or five years out and say the story plays out as expected. The company earns grows $12 \%$ a year, they are buying back their stock and people see that it is a good business. Well, in three years if they price MCO to return 8\% a year, so the stock may double. You may collect $50 \%$ of that in two years' time because everyone sees what you see. We may get paid upfront by a faster rise in the stock due to a big multiple bump.

People may say what do I have to pay to get $8 \%$ a year if it is going to be worth X in a few years? That is how you get your multiple expansion and sometimes fairly quickly.

Mr. Market usually gets it right if you have done your analysis correctly. If in 10 years, I believe it will earn $16 \%$ a year, then in three years I may be averaging $40 \%$ per year. A big chunk of my return may come in the near term if the market charges a $8 \%$ discount rate.

In effect that is what happened to MCO's. It went from a 21 x multiple to a 30 x multiple then the return drops to $8 \%$ a year after that. The stock price will not move in a linear fashion.

I don't know if you remember when we looked a Duff \& Phelps and we had three scenarios of growth. Yet we still undershot the growth rate. There was in effect an explosion in the different uses for MCO's product, but you knew the trend was going your way; they had only penetrated a small percentage of the market. The trend in earnings grew $30 \%$ to $40 \%$ for a few years. This happens with a spin-off where they do things efficiently. It is complicated to make these assumptions and sometimes you are wrong.

Frankly, we bought it at $\$ 21$ and sold it at $\$ 35-\$ 36$. In our good scenario we had a $\$ 70$ stock. One of our reasonable scenarios was three years. The stock did go there. We didn't hold it-any reason to do the wrong thing.

There are so many important points in what $R G$ brought up today. It is not only important how much a company earns but how much you get to keep and still get your growth rate. Growth and ROIC --examine the capital investment requirements to grow.

Obviously, Coke had to put 20\% of their cash flows back into their business to maintain their growth rate, but MCO even had a better business where they did not have to reinvest anything and those earnings were worth more. This is a very important way of looking at the world. You can do all your calculations and say $16 \%$ annual returns--that is pretty good--not great. But if you look at the world, this is what I think it is going to earn in three or four years, and if it gets a fair multiple at that time based on ROC and earnings growth, I could get an astronomical rate of return.
$M C O$ was a unique business, a considerably great business. If we could have compared this to $S \& P$ as a stand alone, I guess we would have done that. But most of our money is not made on comparable analysis; it is a check. Either the comparables are trading much higher and this is a better investment and you want to know why your stock is not trading at those comparable levels.
Or all of the industry is trading too low and either you stumble across or you did the analysis and this is the cheapest of the bunch or you like their business the best. And you are willing to pay up a little bit. So it is a combination of factors. Usually we are finding a situation where we -we don't make thematic investments based on the price of commodities or oil.

This was the first time we paid 21 times normalized earnings for a company. This was sort of a wake-up call. We really don't want to do this. But let us do this exercise to see if we can justify this because it works. If you are doing something that works, it is very hard to do something different. Obviously this can happen to a lot of companies that are doing well. They don't see the competition coming because they want to hold onto their core business. They get blind-sided.

In this particular case there is always money to be made in many different ways. Just because I am teaching you the way we do it, it is not the only way to make money. It is a way that I think works. If you have something better to do, that is fine. We have always had an opportunity to invest in cheap stuff. In what I call a good business at a little higher price. This is something more to compare and another weapon in your arsenal.

It is very seductive to be in great businesses and see a lot of good things flying off of that to then go and buy cigar butts after that. There is plenty of money to be made at that. It is a bit of a little different game. Buffett can't play in that anymore.

It is almost taking a leap of faith to assume that the business will continue as it has. What is your plan to get those great results in the future? What will they do with the capital? With something like MCO there are not many calls you can make.

Part of the analysis is taking a background of the industry. Read analyst reports. Most people would have said a good business but fairly valued. In three years from now, MCO could be at $30 \mathrm{x}-35 \mathrm{xs}$ prospective earnings. There is no business I would give a 30x multiple to on normalized earnings for the same reason I would never use less than a $6 \%$ yield on a long term bond. $30 x$ would be $3.3 \%$ return—a return too low for the risk.

We were hoping for more growth than $12 \%$ but used that for a conservative rate. You hear a lot of smart people, but we are not that smart. We spent $1 / 2$ hour going over stuff we sold that subsequently doubled. We made a lot of errors. It is good to make a lot of different errors and still make money.

We looked at MCO because it was a spin-off number 1. People wait to see it happen. I don't want to waste too much time on the psychological reasons people wait. 21x doesn't look that enticing. How good this
actually was. The question would be that Buffett filed on it and yet we bought it 5 months later. We look at spin offs anyway. So I would say that if you see something at 21 x then look at it if the business is exceptional.

Student: How often do you migrate to higher quality businesses?

## Portfolio Management

JG: Everything comes up rarely. We hold 5 to 8 securities for a year to 2-5 years. We may only need to find one idea a year. We may do American Express for a few weeks. AXP is similar to Coke and it may be better in some ways.

Right now, the market for small cap stock was up $50 \%$ to $100 \%$ in 2003 and it was up again in 2004. Most of the values are in bigger, good companies right now. When the small cap market gets killed and I can buy retailers at 6x earnings, then I am not picky, I will go do that. Right now some of these better companies are where some of the better deals are.

I am not measuring one against another. It (my interest/investment) depends upon which I found first. What is cheap enough to meet the hurdle. Basically it is a big world out there, there is plenty to choose from. It is more what you know and what you feel competent in. Your circle of competence.

Think how powerful that is-knowing what something is worth is very powerful. That information is almost everything. And you have the ability to look ahead three or four years and not worry about the next year or two. And not worry about how other people are doing. That is the whole ball game.

You are all smart enough now to do valuation work. And know when you know it and that is where practice comes in. You are smart enough now, but you don't have the experience. And you need to go through the school of hard knocks and you will keep getting better. I would say we keep getting better at what we are doing. We still make tons of mistakes, so it is good that we got better, but we make different ones. It gives us more to choose from as we keep learning. You always keep learning and you always get better. When you think you have it knocked, you don't. Expect to be right more than you are wrong.

## Back from break

Joel Greenblatt: You can't get this analysis of Moody's from a text book and it took us a long time to think this way. Rob and I wished we had this good stuff. Ask questions if you don't understand this.

This was the end of the lecture.

## Additional Notes from other sources

## From The Essential Buffett by Robert Hagstrom: Why Buffett purchased Coke in 1988

When Buffett first purchased Coke in 1988, people asked: "Where is the value in Coke?" The company's price was 15 times earnings and 12 times cash flow - $30 \%$ and $50 \%$ premiums to the market average. Buffett paid five times book value for a company with a $6.6 \%$ earnings yield during a time of $9 \%$ long-term interest rates. He was willing to do that because of Coke's extraordinary level of economic goodwill. The company was earning 31 percent ROE while employing relatively little capital investment. Buffett explained that price tells us nothing about value. The value of Coke is determined by the total owner earnings expected to occur over the life of the business, discounted at an appropriate interest rate.

In 1988, owner earnings of Coke equaled $\$ 828$ million. The 30 year Treasury bond (the risk-free rate) traded near a 9 percent yield. Coke's 1988 owner earnings, discounted by $9 \%$, would produce an intrinsic value of $\$ 9.2$ billion. When Buffett purchased Coke, the market value was $\$ 14.8$ billion (a $65 \%$ premium), suggesting that Buffett might have overpaid for the company.

## However, when a company is able to grow owner earnings without the need for additional capital, it is appropriate to discount owner earnings by the difference between the risk-free rate of return and the expected growth of owner earnings.

If Coke were able to grow its earnings on average 5\% for a long, long time then $\$ 828$ million/(9\% alternative rate of return - 5\% long term average growth rate in earnings) = \$20.7 billion or round up to $\$ 21$ billion.

So if Buffett purchased Coke at a $\$ 14.8$ billion value its intrinsic value was $\$ 21$ billion or higher-- or Buffett was getting a $40 \%$ discount to a conservative appraisal of Coke’s intrinsic value.

## Return on retained capital

From Buffettology: Warren could reason that in 1994, if he paid $\$ 21.95$ for a share of Coca-Cola stock that had per share earnings of $\$ 0.98$ a share, he would in effect be getting an initial after-corporate-tax return on his investment of $4.5 \% ~(\$ 0.98 / \$ 21.95=4.5 \%)$. And this rate of return would expand because Coke's per share earnings were growing at an annual compounding rate of $17.2 \%$ to $18.4 \%$ a year.

Warren believes that a company should retain unrestricted earnings only if it is reasonable to project that the management would be able to do a better job investing those unrestricted earnings than would be the shareholders.

## How do we as investors measure a company and its management's ability to profitably allocate

 unrestricted earnings? What is the management skill in allocating capital and management effectiveness?We take the per share earnings retained by a business for a certain period of time, then compare it to any increase in per share earnings that occurred during this same period.

In 1983 Coke made $\$ 0.17$ a share. This means that all the capital invested in Coke up until the end of 1983 produced for its owners $\$ 0.17$ a share in 1983. Now between the end of 1983 and the end of 1993, Coke had total earnings for this ten year period of $\$ 4.44$ per share. Of that $\$ 4.44$, Coke paid out in dividends during 1983-1993: a total of $\$ 1.89$ a share. This means that for the ten-year period between 1983 and 1994, Coke had retained earnings of \$2.55 a share (\$4.44-\$1.89 = \$2.55).

So between 1983 and the end of 1993, Coke earned a total of $\$ 4.44$ a share, paid out in dividends a total of $\$ 1.89$ a share, and retained to its capital base a total of $\$ 2.55$ a share.

During 1983-1993 Coke's per share earnings rose from $\$ 0.17$ a share to $\$ 0.84$ a share. We can attribute the 1983 earnings of $\$ 0.17$ to all the capital invested in Coke up to the end of 1983 . We can also argue that the increase in earnings from $\$ 0.17$ a share in 1983 to $\$ 0.84$ a share in 1993 was caused by Coke's management doing an excellent job of utilizing the $\$ 2.55$ a share in earnings that Coke retained between 1983 - 1993.

If we subtract the 1983 per share earnings of $\$ 0.17$ from the 1993 per share earnings of $\$ 0.84$, to get $\$ 0.67$. Thus, we can say that the $\$ 2.55$ a share that was retained between 1983 and 1993 produced $\$ 0.67$ in additional income for 1993. This means that the $\$ 2.55$ in retained earnings earned $\$ 0.67$ in 1993 for a total return of 26.2\% (\$0.67 / \$2.55 = 26.2\%).

Coke's management earned a $26.2 \%$ return in 1993 on the $\$ 2.55$ a share in equity that Coke retained from 1983-93.

## END

## Greenblatt Class \#7

March 30, 2005
The Exam is the last class on 20/April - closed book.
Presentations next week. Papers due.
Your papers are due next week unless you are one of the groups who are going after that.

## Stock Screening and Generating Ideas:

I wanted to talk about stock screening later in the class. I found this yesterday in the Wall Street Journal: Nuveen Spin-off

Nuveen Invest down 8\%; St. Paul to Sell Controlling Stake

## DOW JONES NEWSWIRES March 28, 2005 1:56 p.m. By Angela Pruitt Of DOW JONES NEWSWIRES

NEW YORK -- Nuveen Investments Inc. (JNC) shares fell 8.1\% in mid-day trading Monday following news of plans to make the asset manager a fully independent and publicly traded firm.

Nuveen's parent company, St. Paul Travelers Cos. (STA) announced Friday that it will implement a three-part plan to sell its controlling stake in Nuveen in a secondary offering. The property-and-casualty insurer owned about 78\% of Nuveen's outstanding voting securities as of early March.

Nuveen shares recently were down $\$ 3.08$ at $\$ 34.92$ on volume of 766,800 , compared with average daily volume of 111,000 . St. Paul shares were up 15 cents, or $0.4 \%$, at $\$ 36.41$.

St. Paul's strategy was not unexpected as market analysts anticipated that some sort of secondary offering or sale to a third-party buyer would be the routes taken. However, investors appeared to have stacked more of their chips on the probability that another institution would cough up the money to buy Nuveen.
"I think the reason the shares are down is because the market was expecting someone to buy them out," said John Leonard, a research analyst at SNL Financial in Charlottesville, Va.
"I think there was a reluctance to buy (Nuveen) at the top of the market given that quality asset managers are trading at premium prices," he said.

Nuveen said St. Paul Travelers will sell 39.6 million of the company's shares, or $42 \%$ of total shares outstanding, in a secondary offering. Under the plan, Nuveen also will buy back $\$ 600$ million of its shares from St. Paul Travelers at the price of the secondary offering.

St. Paul Travelers announced in late January that it was reviewing options to sell its Nuveen stake, valued at about $\$ 3$ billion. The move is aimed at raising cash after a $\mathbf{\$ 9 2 2}$ million charge related to its asbestos reserves.

Given the hefty float of Nuveen's shares set to be unleashed on the market, supply concerns also may be getting the best of Nuveen's stock, analysts said.

Nuveen is the largest issuer of closed-end funds and has $\$ 115$ billion in total assets under management. The company in January reported $\$ 8.1$ billion in gross sales for the fourth quarter of 2004, a 99\% increase over the prior year. In addition, Nuveen's fourth-quarter net income jumped 15\% over the same period a year earlier.
"Nuveen might be better off because they will have...higher float (and) more research coverage from Wall Street," said Jim Johnson, an analyst at Keefe Bruyette \& Woods of the secondary offering. He added that investors probably thought a third-party buyer would swoop in or that a bidding war for Nuveen would unfold.
"Nuveen is a high-quality company," Johnson said.

Neither Leonard nor Johnson owns Nuveen shares, and their firms don't do investment banking work for the company.


## Potential Opportunity: A motivated seller

What would interest a special situations investor in this article? A motivated seller. Right, a motivated seller. St Paul wants to sell to raise cash by selling 922 million shares. Right away these guys are blowing out of this because they screwed up in their insurance business.

It may be going down because there will a lot of stock for sale all at the same time, so we may get a good price as a value investor--possible. The company is going to buy back $\$ 600$ million of the stock that is held by St Paul, so the stock is at $\$ 34.25$ and change so they are buying back 17.5 million shares. Perhaps this will have debt to leverage a good company. If indeed it is cheap. Anything else?
$\$ 42.50$ buyout price is the baseline price for a sale. Maybe that is a baseline for what someone would pay. Or gee the thing was for sale and no one would buy it. Traditionally they sell closed-end bond funds that is a valuable income stream. It is tough to lose that income stream-an annuity-like business.
$80 \%$ of your float has been owned by a big insurance company where it was not considered important as far as size. That might get management focused. The stock dropped $\$ 7$ or $\$ 8$ to $\$ 34$ so it is cheaper than it was. The seller is a motivated seller for non business related reasons for this business. The company is buying back stock, so they are changing the capitalization of the company to create that. Management is perhaps happy to do that. How much will they (mgt.) own?

## Management

Wall Street tends to overpay people a lot, so I would worry about that. In management companies where your resources-there is not much capital in these business--go home every night, mgt. ends up taking all the profit for them. So I would like to see how their shares are bread and buttered. That has happened at other companies. This is a $\$ 3$ billion dollar company so management can be piggy and there is still a lot of value left for us.

## Analysis

So what I did was, I took out the prospectus-read this. So anyway, I did a quick and dirty. I may look at 20 or 30 of these. I happen to know these are high return businesses, we used to own a closed end fund (this) for other reasons.

The quick and dirty: EBIT was $\$ 254$ and EV is $\$ 3349$ so $13.5 x$ EV/EBIT. ROIC was over $100 \%$. So it looked like a valuable franchise. I was looking at the break down of what the business looks like.

They have $\$ 115$ billion assets under management, but included in that $\$ 50$ billion is in Exchange Traded Funds (ETFs). That is a big business but how profitable is that business. Are those dollars as valuable as the closedend funds? Mutual funds--there is only 12.7 billion, so you have $\$ 50+\$ 12.7$ then you have $\$ 37$ billion in managed accounts or retail. And you have $\$ 15.6$ billion in managed institutional accounts. So each of those businesses is a little bit different. Break out each business. I want to go through each one of these. Each one has a little different stickiness to it; each one has a little different multiple to it. Cash-flow characteristics for each. Do they stink at what they are doing? Managed accounts might be pretty diffuse which is good. I want to see how profitable are the ETF funds--\$50 billion. If it is profitable, they may be able to expand that business.

It didn't seem like mgt was going to own much stock relative to their salaries. The CEO earned $\$ 6$ million a year. So let us say he had an option on million shares. $\$ 6$ million in salary vs. $\$ 36$ million in stock. They think they have a great platform and they are well-positioned in rapidly growing segments especially in ETF.

They will expand their marketing and distribution.

Going independent may be a catalytic event. They may be able to make earnings explode more than $12 \%$ to $13 \%$ a year over the last four years which is pretty good, but the market has been good as well. I would make all those assessments, because 13.5x EBIT may look expensive, but EBIT may grow $30 \%$ over the next few years. Then you are down to 10x EBIT in a business that is earning $100 \%$ return on capital. I wouldn't write it off right way because of the pretty high price, because of this event.

So that is the beginning of an analysis. If this was at 10x EV/EBIT, I would be buying the stock and asking questions later, but at 13xs I am asking a lot of questions and probably not buying the thing. But I will go through the analysis and look to see whether I should or not. Already there is a thesis built from reading the article.

My analysis is not dissimilar to our analysis of $A X P$. AXP has two businesses: one business has a high ROE and the other a low ROE. OK, I want to look at that. Also, the market is kind of weak lately, so this is the kind of thing that could really get crushed. These guys really need the money. St Paul just wants to get the deal done. Once you are at this phase, there is a big cheering squad (investment bankers) to get this deal done.

We may see the stock down another $\$ 6$ or $\$ 7$ from here.

## American Express (AXP)

The thinking on $A X P$ is this: usually when I buy the stock, it goes down. Number two is this: if I am truly taking a three or four year horizon in my valuation, then what is happening in the short term does not matter. What matters is what I think normalized earnings will be three years from now. Which should take into account the fact that account if loss ratios are lower than usual, income credit spreads are bigger than usual. There are a lot of things that go into that. I analyze that. They are 20 cents above normal, but they are also 50 cents above normal in spending in this area. So, they traditionally cut back in this area-it is not a big factor.

You have to decide what is material and what is not. It turns out a lot of stuff is not material, if you are looking out normalized earnings three or four years. Like I said before about Amex-whether I bought them or not, it does not matter. This analysis is very important that we did with Moody's. It should be worth in 3 to 5 years, X dollars, but if someone wakes up in the next year or two before my leaps expire, I will get most of that money upfront instead of the expected return of $8 \%$.

The risk in the LEAP is that there really is no intelligent way to know where the market will price $A X P$ in the next 22 months. There is an intelligent way to know where the market will value $A X P$ in three to five years. By owning a stock, you have that comfort level of whenever it happens it happens. If you are in a LEAP with a 22 month expiration and this market can do anything, you are in a window of risk. You are making a risk/reward bet.

If I have the wherewithal and my options expire, I will (could) re-up and buy another set of LEAPs. It is a cheap way to borrow money.

That is one way to read the paper. I am trying to show you even obvious stuff. The efficient marketeers would have you believe, it is already in the paper so the twenty dollar bill is not there because someone would have picked it up. This is the way it really works.

## Stock Screens

So I will do a stock screen just for fun. This is off of Multex. This screening package cost $\$ 1500$ a year-it is sold by Reuters. And maybe it is a little easier to use. A great screening package for a cost of a couple hundred dollars a year is from AAII.com Powerinvester.com, Smartmoney.com, there are a lot of web screening packages. They all use the Reuter's data.

I use the screening package but it is not worth the money. One thing you want to be careful with the Reuters's Data is that it is not that good. Sometimes the data is not accurate. All I am saying is that if you get something super cheap, use that as a first step.

Compustat is a great product. But use stock screens as an idea generator.

Book Value per share last quarter. Instead of doing EV/EBIT we will do simple trailing P/E trailing twelve months. Divide that by tangible book value. Why did I multiply ROE by BV/Tangible BV? I am goosing up the ROE because ROE is based on reported book and I am trying to say I really care about looking at ROE and tangible book value.

Use unique screening criteria!

# Greenblatt Class \#8 

## Special Situation Class

April 20, 2005-The last day of class.
Next week we will have a few presentations. Also, Matt Mark runs Jet Capital and he will discuss distressed investing.

## How to Invest in Retail Companies

Today we have a special guest, Ms. Linda Greenblatt who has run a hedge fund for the last 10 years with an extraordinary record. She invests almost exclusively in retail stocks and some consumer stocks. She has had a tremendous record sticking to what she knows. In other words, her circle of competence didn't have to be that large. She has been able to build a nice portfolio with huge returns over those ten years. And it shows that you don't have to know many different things. You will hear from Linda how what level of analysis you can

Last year her pick that she discussed in class was Abercrombie (ANF) which went from $\$ 25$ to $\$ 58$ for a + $120 \%$ return.

## Presentations: Corinthian College, Winnebago and H\&R Block

Corinthian College: An attractive price to earnings and cash flow. The company is being sued because some students can't transfer their credits. We believe that the company will be exonerated because there is no evidence of wrong doing. Every student signs a binding arbitration.

Growth has slowed. Historical profit margins of $20 \%$ was not sustainable. The Street is spooked, but it is not justified. There is slower growth and margin compression with capex temporarily higher.
$\$ 1.4$ billion in market cap and \$1 billion in sales. EV is less than Mkt. Cap. 20\% EPS growth and 15\% revenue growth. More capex last year so there will be a jump in FCF.
We define Free Cash Flow: EBITDA - CAPEX and Chg. In NWC and Taxes. Or after tax EBIT. $\$ 100$ million in FCF.

With a $7 \%$ to $8 \%$ WACC $=\$ 30$.
EV/EBIT 8.5 with ROE of $35 \%$ ROE
Growth Capital 80\% to 90\%
Maint. Cap. 20\% ROIC.
All management has to do is open satellite campuses. Room for more stores. Capacity to grow and the need to spend more.

## Organize Your Pitches.

Peter Lynch used a three minute egg timer to hear analyst's pitches.

Joel Greenblatt: Provide the big picture:

- What are you paying?
- What are the returns on capital?
- What are the normalized earnings?
- What are the growth prospects (of normalized earnings)?

So you organize yourself when making a pitch use those points.

Bill Miller: Says you should give your main points:
Thesis then

Bam
Bam
Bam
Risks

And be done.

## END

April 6, 2005

## Linda Greenblatt's Lecture on Investing in Retail Companies and a Retail Analysis of Ann Taylor Stores (ANN)

## Prof. Joel Greenblatt ("JG"):

Today we have a special guest, Ms. Linda Greenblatt who has run a hedge fund, Saddle Rock Partners, for the last 10 years with an extraordinary record. She invests almost exclusively retail stocks and some consumer stocks. She has had a tremendous record sticking to what she knows. In other words, her circle of competence didn't have to be that large. She has been able to build a nice portfolio with huge returns over those ten years. And it shows that you don't have to know many different things. Last year her pick that she discussed in class was Abercrombie (ANF) which went from $\$ 25$ to $\$ 58$.


Linda Greenblatt will discuss her current idea, how to evaluate it, and what her thoughts are now.

## Linda Greenblatt ("LG"):

I will talk a little bit about how I started and why I went into retail. I really wanted to find a niche for myself. Something I could relate to. I like the consumer sector. I like to shop. I focused on those companies easy to understand where you could get out there, touch , feel and understand. I could get the customers' understanding and get their feedback. So it is one of the easier sectors, in my opinion to understand and analyze. Another thing I really like about retail is that you are getting a lot of info and it comes out on a monthly basis, for example, like same store sales (SSS)--Store sales of stores that have been opened for at least twelve months.
Unlike other industries where you are getting numbers on a quarterly basis. You are getting a ton of information coming out of these companies on a monthly basis, which is good and bad. It is bad because it creates tremendous volatility in this sector, but that is the reason it is good. Because you get the opportunity to buy things when they are unfairly cheap. You get to buy things when people are often trading them. If you have a value orientation and a longer term orientation-when I say longer-term I mean one to two years because people are mostly focused on the next months' numbers. If you can take a step back and see the big picture, there often a lot of opportunities out there.

And a lot of people hate this sector for that reason. I can’t analyze what the next hot trend is. I don't know whether ABERCROMBIE (ANF)'s Spring line looks good. And that doesn't matter and that is the beauty of it. You really don't have to understand, "Whether management get the right denim skirt doesn't matter, what you have to get right is if management knows how to run a business, are they generating good returns on capital? And if they miss so what? I get another chance next season. And they certainly are not going under in the meantime.

So ABERCROMBIE (ANF) is a case in point if you look at their stock chart and you can go back a year ago you could have doubled your money between then and now. I can't say that a lot has happened in the business fundamentally that has changed from what kind of business they are running or who their customers was. There was a management change but in my opinion it was not significant, but what was happening for a good year and a half prior is that they were generating negative same store sales (SSS) and negative comp store sales. People throughout the industry could not focus on what type of business they were running.

And they were generating EBIT margins close to 20\%, amongst the highest in their peer group. And all anybody could focus on was on whether their next comp stores sales was negative. In 2002-2003, you could have taken a step back and said, I recognize that comp store sales are negative, perhaps there are merchandising issues here, but I can see they run a good business and if they could stabilize that comp, if they could just generate at the bottom of those comp numbers-they were running negative 9 , negative 5 , negative 9, but once they could stabilize their comps, people thought, "Oh wow, look at this business!" This is a great business and all of a sudden people were not just focused on the SSS but on what the actual business was doing.

This article (included below) interviewing a money manager who covers retail stocks and his quote is very similar to how a lot of people think about retail stocks and how most or all of the sell side thinks about retail stocks. Basically he said:

I have my people visit stores and malls to see how much the items are marked down and how long the lines are at the registers. I'll buy a stock if I think the company is going to beat numbers and short it if it is going to miss numbers. It is that simple.

INVESTING: King of the Retail Jungle FORTUNE Tuesday, March 22, 2005
Hedge fund manager David Berman profits by thinking like a patient predator.
"I used to be a victim of people like me," says hedge fund manager and onetime accountant David Berman. "Every time I bought a stock, someone smarter than me was selling it. Every time I sold, someone smarter was buying." So when he formed a firm to manage his own money in 1997, Berman decided to focus on a single sector and master it. His choice? Retail. This son of a furniture maker spent a year walking malls and eventually developed a custom index-the DeeBee (as in David Berman)—to compare sales vs. inventories at U.S. retailers. His specialization strategy has paid off: Berman says he has averaged a return of $17 \%$ after fees over the past eight years with only three down months. He now manages more than $\$ 100$ million through Durban Capital, a hedge fund he named for his hometown in South Africa and launched in 2001. A big part of his formula is that he's willing not to buy if prices aren't right. FORTUNE's Julie Schlosser phoned Berman in Cape Town (where he spends three months every year) to chat about the sector's latest batch of strong sales reports, why they don't necessarily bode well for stocks, and what investors can learn from crocodiles.

## Despite lackluster holiday sales, the S\&P 500 retailing index is up 11\% for the past year. Can retailers keep beating expectations in $2005 ?$

February surprised everybody, retailers included. It surprised me. There are a bunch of theories why. Perhaps tax refunds are better than people thought they'd be. Fashions are pretty good. And I think weather has been a positive factor. It was about four degrees warmer than usual across the country in February. But to a large degree, during this time of year the retail group gets moved for macro reasons.

## Which macro factors affect retailers?

Sometimes the best months for retail sales have been the worst months for stocks. If it is the best month for retail, what happens to interest rates? They go up. And that's not good for retailers. You may have that now. The Fed hasn't been able to slow the economy down, but bond yields are going to do the job. Greenspan has been very ineffective with raising rates. But the long range is out of his
control. The rates have gone up to over $42 \%$. Home loans may start going higher, and that will slow things down. I'm not a bond expert, but those yields may well go higher because this economy is really rocking. Or at least people think it's rocking.

## How do you figure out if a stock is a good value?

I maintain that I am not smart enough, and I don't think anyone really is, to know what the P/E should be. My job is to understand what the EPS [earnings per share] should be. I look for facts. That's why I measure inventories. I have my people visit stores and malls to see how much the items are marked down and how long the lines are at the registers. I'll buy a stock if I think the company is going to beat numbers and short it if it is going to miss numbers. It is that simple.

Your DeeBee index measures sales growth vs. inventory growth. Is that how you predict whether a company will beat Wall Street's earnings estimates?

We summarize every publicly held retailer in America. That's almost 300 companies. We've been doing this quarterly for many years. On an individual level, it gives us a great sense of which companies are going to do well because their inventories are well controlled and which ones have potential for missing numbers. It gives us a sense of the profitability of the group going forward. And it also gives us a sense of the future strength of the economy, because retail leads the way. If inventories are depleted what does that mean? It means retailers are going to be ordering faster, and that means the back end of the economy is going to do well. It is a lot of work, but it is really worth it to us.

## What do you mean when you say you use a "Crocodile Approach"?

Just wait and be patient for the right opportunities. The crocodile can go for almost two years without eating food. It has very small legs and can't go very fast. It waits by the riverbed. If its prey doesn't come, it just sleeps all day. You want to be like the crocodile and wait for the prey to come to you. You don't want to rush off to the prey. You want to wait for the big zebra and grab him and eat it up. With that in mind, I've never been afraid to build up a big cash position. You can't lose money if you're in cash. That's why I don't have many down months. I've never used leverage. In fact, some of my investors will be upset with me, but until recently I rarely had much more than $50 \%$ of my money invested-both long and short-at one time. That means I am half in cash. I recognize that is too low. It needs to increase. But it's because of the Crocodile Approach.

Last month Federated Department Stores, parent of Macy's and Bloomingdale's, Ann Taylor Stores (ANN) announced plans to acquire May Department Stores. Is it a sign that the department stores are truly dying?

The merger is a function of Wal-Mart's power. Wal-Mart by our numbers has $21 \%$ of the sales of publicly held retailers, excluding autos. And roughly $8 \%$ of total sales. Almost one in every ten sales in America is done in Wal-Mart. That has totally changed the retail landscape. As a result the department stores are really being squeezed. They're having to scramble to stay competitive. It is probably just a natural evolution of the retail landscape. There is just a slow deterioration in the department store mode.

## What is the DeeBee index's top-rated stock right now?

I can tell you who is good on my inventory list but they might already have a high P/E. At the top is American Eagle Outfitters (AEOS, \$29). It just reported sales up 37\% while inventories are up only $14 \%$. That bodes well for future margins and profits. But a large amount of that is reflected in stock price. I own it, but I've been reducing my position. American Eagle has got great management. They've beefed up their staff over the last couple of years. They just hired some good people for a new concept that they will be announcing soon. It will give them another leg of growth. They are firing on all cylinders. Nordstrom (JWN, \$55) also had good results, with sales up 9\% and inventory up only $2 \%$. That's the best in the department store category. The problem is that those results are already factored into the stock price. Remember, the concept of who is going to beat earnings and the stock price are two different things.

## So the crocodile isn't running out to snap up zebras?

I am really concerned that the retail group has had a nice run. Many companies are looking worse this year in terms of inventory growing faster than sales. It's hard to find good longs. I'm in sleeping mode, waiting patiently for opportunities.

Linda Greenblatt (LG) continued $\qquad$

And I say to you that is your opportunity. It is that simple. There are so many people out there doing that whether they miss their numbers or not. It creates so much volatility and so much opportunity for you. And you will read any analyst report, particularly a year ago in $A B E R C R O M B I E$ (ANF), they (Wall Street Analysts) talked about the ABERCROMBIE (ANF) core business and the fact that it couldn't generate double digit SSS as they had in the past. Or analysts will focus on what the stores looked like in March and April. As opposed to what the company was doing and how productive their store base was. But they had tremendous growth—not so much in their core business--but in their Hollister business which is their secondary business, which has been a great growth vehicle for them.

Once again tremendous opportunity here if you are looking at the right stuff.

Student: What was the EV/EBIT multiple for ABERCROMBIE (ANF)?

Linda Greenblatt (LG) - it was at $7 x$ but our target was $10 x-11 x$ EV/EBIT. ROIC was high teens after-tax.

## American Eagle Outfitters ("Eagle" AEOS)

Student: What has happened with this brand? AEOS changed their merchandising. Now they are more surf oriented than conservative.

LG: They definitely were having merchandising issues and they were really having trouble finding what their identity was. They were being squeezed at both ends. ABERCROMBIE (ANF) was at the higher end-the kids who wanted to shop ABERCROMBIE (ANF) and wanted the ABERCROMBIE (ANF) brand. While on the lower end, they were being hurt by Aeropostale (ARO) where they couldn't compete with those prices and $A R O$ was knocking off a lot of what Eagle was doing. Eagle had defined a niche for itself, but they were also shook up their merchandise team in order to improve their merchandise offering. They also had some little help from their competitors when ABERCROMBIE (ANF) simultaneously announced that they wished to go more upscale. Eagle has tried to focus on the high school customer. ABERCROMBIE (ANF) has gone a little older and a little bit higher end by putting in higher price points. So Eagle had a couple of things working in their favor.

About a year ago you would see, when Eagle's price was at $\$ 13$ to $\$ 15$, people basically had written them off and had decided that they were never going to regain their footing. What happened during that time, if you looked at EBIT margins, those margins were headed down to the $8 \%$ range. At the time if you had looked at it, what might have been attractive to you is that the EBIT margins were trading in the $8 \%$ range and two years before the EBIT margin had been in the $12 \%$ range. ABERCROMBIE (ANF) as you might have remembered from the last slide was in the $18 \%$ to 19\% range. There could be a lot of opportunity here if they could just get it right. Basically the common stock was trading at 8 times earnings. People had written them off; they had negative comps. Skip forward 6-8-12 months later, you can see the stock has doubled. It has gone from $\$ 5$ to $\$ 30$ over the past 2.5 years. And what has happened during that time, they have improve their merchandise and some of their competitors have moved away so they are not competing head on. But the other thing people started to take notice and a stock that was trading at $8 x$ back in 2003 is now trading closer to 17 xs-or over a $100 \%$ earnings multiple expansion.

Student: What happened to store count in 2002?

|  | 2000 | 2001 | 2002 | 2003 | 2004 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Stores | 790 | 864 | 915 bought a Cdn. | 846 | 887 |


|  |  |  | Chain |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

LG: What happed was they bought a Canadian chain and basically blew it the moment they bought
it. So they wrote it off. If you notice in the store count which is on the bottom line-they are pretty saturated. If you ask them, they say they can open up to a 1000 stores, but there are only so many malls that exist. So they really needed a new growth vehicle—having said that, the stock is still trading at $18 x$ to $20 x$ s, in spite of no new growth vehicle.

JG: Why is it trading at such a high multiple?

LG: Because they are generating great comps (SSS). The point being that when these stocks are in favor, people focus on the wrong thing.

Student: What you had to get right in this story was to get the merchandising sales trend correctly. So are you not having to guess on future growth in SSS?


LG: It is the fact that they (management) recognized that they had issues; they shook up their merchandising team. Plus they knew they were having a hard time competing. What you have here, though, is a company that definitely has a customer base. Definitely what you were starting to see is they were going to focus on a particular customer. What happened is that they were all over the board. They were focusing on the 20 year old kid, on the 15 year old kid and they really couldn't get their focus down and that was largely in part to their merchants were not being able to target their customer well.

So the answer is-I didn't know for sure they were going to get it right, but they were at an 8\% EBIT margin and a couple of years earlier they had $12 \%$ margins when they had run things just a little bit better and their closest competitor (ANF) was at 19\% margins. This smells like opportunity to me, because actually they did everything wrong and they ran an 8\% EBIT margin. So if they laid out a five step program to improve-well if they get two or three of those points right, there is certainly a big upside opportunity there. And, as I said, another thing went in their favor was an external factor in their industry.

JG: Let me add to that. When Rich Pzena was here, he said low ROE companies make changes: they fire management, they close factories. They do stuff because it is not working (The Board of Directors or new management make changes to improve or stop losses). That is what happens here in retail. Here it was trading at a low multiple of depressed earnings. They were doing everything wrong, but they were still earning some money. They were not going out of business and they had a strong balance sheet. So the question was-the great thing about retail is that if Spring stinks (their merchandise assortment of customer acceptance), then Fall will be better or Winter. So if you buy them cheap enough, they didn't have to get it right in this short of period of time. You see it went from $\$ 5$ to $\$ 30$.

If you have a two to three year horizon and you say look I still have a pony on the track and it still is running and the race is still going on. I am still in business; I am not going out of business. This season stinks, but next season won't. Maybe we will hire this guy; maybe they have the platform to really do it.

If you had walked into their stores last Christmas and they couldn't give stuff away. And if they continue to be this bad and they still are generating some money and you could see that the stock is trading at a low multiple, then can it get any worse? Or they could get a few things right? And if they get a few things right, then people will start to sit up and take notice. Then the stock can trade at a greater multiple-10 to 12 xs—off a greater earnings base. Because these were incredibly depressed earnings. Then all of a sudden you get your returns from $\$ 5$ to $\$ 10$ which is a pretty good return. (You are getting a double upside from both an increase from depressed earnings to normalized earnings and a multiple expansion as other investors gain confidence). If you are playing for a $\$ 5$ to $\$ 10$ return, you don't have to be playing for a return of $\$ 5$ to $\$ 30$.

JG: When Linda was talking about ABERCROMBIE (ANF) which she did own, she bought at $\$ 25$ on sort of on a similar thesis and now it is at $\$ 58$. She sold out in the mid- $\$ 40$ s, which is still a pretty good return ( $80 \%+$ ). Here you might argue (with AEOS) this is slightly overvalued. Things are going well, there are not a lot of growth prospects and it is trading at $17 \mathrm{xs}-18 \mathrm{xs}$ so you probably don't last till then.

Student: Do you look at retail like cyclical companies when their earnings are depressed they might have higher multiples?

LG: Again the answer is that people love to beat up these things up. People love to write off retailers. Everybody's thing with retailers is--because what is their reason for being? If another retailer fell by the wayside, who would care? When people see things on a negative trend, these things (retail stocks) just get battered. So having followed retail for as long as I have, the low end of multiples is $8 x s$ to $10 x s$ and the high end is $20 x s$ time range-P/E multiples. A lot of retailers these days carry a lot of cash. So that also gives us some security to last through the bad times.

Student: Investors once they see a downtrend, they write-off and sell their stock when they see the bad numbers in comps?

LG: Psychologically when you are seeing month after month of negative numbers it is tough not to panic. I can tell you having lived through when a comp sales posts a negative $15 \%$ comp, not to say, maybe they are going out of business, maybe no one will go back into the store. It really is tough to take a step back and say it is a one season thing, or one year thing, but when they get it right, there is so much potential and the operating leverage is huge.

Student: So when of your edge is that you are so patient, you are a contrarian to the other guys.

LG: That is how I like to look at it. I take a long term perspective in an industry which people feel doesn't warrant that.

Student: The industry is pretty leveraged given the capex for the stores. If the sales go down, the profit goes down. You mention the volatility. Have you thought of using the option pricing model to price stocks?

LG: I like to keep it simple. JG: The answer is no.

Student: Look at company Wet Seal. How do you know if it will survive or not. A turnaround?


Student: Wetseal is another teen retailer to teenage girls, that is just about bankrupt.

## LG: You mean Slutty teenagers?

Wet Seal is a company that definitely, they opened way too many stores and stores way too large and ran into a problem when their comps turned negative. What is happening now is that they are closing a good portion of their base of unproductive stores and they are going to try to give it a go with some of their more productive stores. They really ran into a problem. They will try to give it a go with their more productive stores and give it a go with their smaller store base. They got rid of their two other operating chains. One they sold; another they closed. They are really getting back to basics.

They were a 700 store chain, they were running three different concepts, and a lot of their stores were unproductive. But what really came out was that they had a large number of their stores that were unproductive. But the hope now is that they have pulled it down and gotten back to a manageable size and back to a simple business. They want to simplify. At the very least, they have closed many of their money losing stores. If they can keep their head above water while they get their act together, at $\$ 4$ it could be a good play. A potential turnaround.

Student: Do you know when these companies store concept reach saturation?

LG: It really depends upon two things. The way you look at it is: for the most part there are A, B and C malls. Then there these things called Life Style Centers, then there are street and other non-mall
locations. You have got to look at the competitive landscape and find out who is their customer base. In Eagle, which is a lower price point store, can have somewhere in the neighborhood of 900 to 1000 stores, because their model works in every one in these different category malls. So you can look at an Eagle and say, Yes, I understand why 1000 stores make sense. But in ABERCROMBIE (ANF) it will not work in a C mall with their (high) price points and it won't work in every B mall either. So ABERCROMBIE (ANF) will max out for the core division in the 400 to 500 store range. You have to know who your customer is and what the price point is. And look at other competitors if they can open a number of stores. Your job is to figure out if that (management's expansion plans and store growth) is realistic or not.

Student: In addition to Comp store sales are their any other metrics you look at?

LG: I will get to that.

I think there are two ways in the examples of Eagle and ABERCROMBIE (ANF) where you could have made money in both of them. Where ABERCROMBIE (ANF) has lots of growth left in their Hollister unit and that is why I really like ABERCROMBIE (ANF). It was not as much a margin play with $A B E R C R O M B I E$ (ANF) because margins were already way up. Eagle, on the other hand, doesn't have the growth left, but Eagle's play was just getting the growth of what they had back to the operating productivity of what it could be and should be. You can definitely make money in many different situations. I like to see a good growth opportunity but there are plenty of situations where they don't have much square footage growth left, but they have plenty of opportunity to get their current business right And I think of those opportunities as equal to the growth opportunities. You can make money both ways.

Student: There was fear about cannibalization between brands in ABERCROMBIE (ANF). Customers would go to Hollister to buy a cheaper version of cargo pants rather than shop in Abercrombie. How did you get comfortable that they were not hurting the more expensive brand?

LG: The arguments people make-l am going to talk about ANN Taylor in a little bit. ANN has their core brand and they have a newer concept called ANN Taylor Loft-that when you open a new concept that is $30 \%$ cheaper than your core concept, how can you make money at both and why won't a customer go from one concept to the other because it is cheaper? And the answer is you have to be comfortable with the fact that management has differentiated the concepts enough that you are really dealing either with two different customer bases or you have a customer who is willing to buy both. And knowing that you continue to look at margins as they roll-out. For example, in ABERCROMBIE (ANF) when they rolled out Hollister, margins did not fall apart. So even though comps were down in Abercrombie, it was not the result of Hollister. And, you do have to do the work
and develop a level of comfort. Every time a retailer rolls out a new concept that is the argument against it. Some do well and others don't.

Student: Say if ABERCROMBIE (ANF) has a margin of $20 \%+$ what is its sustainable competitive advantage (SCA) and what gives you confidence that $A B E R C R O M B I E$ (ANF) can continue to have high margins?

LG: You to have confidence in the management team and that they are thinking the right way. If you think that this is a management team that happened to luck into a great concept in $A B E R C R O M B I E$ (ANF) and they are willing to launch a new concept that is going to be dilutive-l don't think that is the way these people think. Management is thinking how can we develop a concept with the best bank for our buck? We are not just looking to grow the store base or the sq. footage, but we are actually looking to generate good returns on capital that we had in the past.

JG: ABERCROMBIE (ANF) had the chance to knock down prices, and they specifically told everyone and made the decision that they were not going to dilute their brand by lowering prices.

LG: Everyone was telling $A B E R C R O M B I E$ (ANF)--when it was a very competitive and promotional environment last Christmas when Eagle was promoting everything out of their store--to drop their prices, you will never sell anything. But management responded by saying, "You know what, we have to maintain the integrity of the brand by maintaining prices." If we miss this season, we miss it. We can't start by cutting prices and having our customers expect to shop on sale every time they come into the store.

Just based on their track record—back to your question--it gave me the confidence that they (management) wouldn't launch a concept that would not generate the type of returns their core concept had.

Student: I imagine it has to be more than just management because then a couple of people could go and start as competitors. Or you can hire these people. What is the competitive advantage beyond management (so as to be confident of the company's long-term advantage?)

LG: All I am saying is that they have a concept that works. The concept generates the kinds of returns that are excellent returns. They understand the formula and they will try to duplicate that formula in another form. So there is not any single formula-Oh, a 4,000 sq. ft. store with an average price point of X is the formula. Part of it is building a brand. ABERCROMBIE (ANF) has built a premium price point brand where they can maintain their prices and that is why they have such phenomenal margins. And they knew if they launched another concept, then they would have to build another brand. They just couldn't just open stores. They had to develop marketing. They
had to develop something that spoke to their customer base and gave the brand legitimacy. So they could have gone out and opened 400 Hollister's but they went out and opened 20 Hollister's. They tested the concept, they built the brand and then they expanded it.

JG: I would like to move on to Ann Taylor Stores (ANN), and then she can answer more questions. One thing I can say is that when Linda buys stuff, it is cheap; it is beat up. You will see, in the next example, she is not buying the company at $17 x$ earnings with fully built out stores with no new concepts. There are reasons it is cheap at that time. And the whole idea of doing what we have been doing is that if you are right and you say this could trade at $50 \%$ to $100 \%$ more and than where it is and if you are wrong and you don't lose money, that is a pretty good risk/reward because you really didn't pay up for those opportunities. It is almost making it seem harder than it is in a way because when you miss you don't lose much money because you bought it cheap. You don't have to be right all the time. So you are saying it could be wrong or it could be very tough to figure out whether they can maintain this, but you don't lose much money if you are wrong. And you could make $50 \%$ to $100 \%$ if you are right and you are right more than you are wrong, then the math works.

So I think-these are difficult questions to answer-Linda is an expert in this field. She still is wrong sometimes, but she limits her losses and she knows opportunities when see sees them. So when she talks about Ann Taylor Stores (ANN) you will see what this opportunity is and it may work or it may not. But you can see the risk reward is tremendous each time. So I think the answer is you make a good guess based on everything you have seen: "Is the management good? Does the brand look good? Are their customers loyal? And things of that nature. And if you are wrong you don't lose (much) money. If you are right you can do quite well. It is not quite as hard as getting it right every time.

The discussion above is similar to the difference between buying "cigar butts" vs. "Buffett-type" franchise companies.

LG: When you want to buy something cheap. I put up some of ANNs closest competitors which are Talbot's (TLB) and Banana Republic.

|  | ANN TAYLOR <br> STORES <br> (ANN) | TLB | CHS | JILL |
| :--- | :---: | :---: | :---: | :---: |
| Price | $\$ 25$ | $\$ 32.43$ | $\$ 28$ | $\$ 13.27$ |
| Market Cap | $\$ 1,790$ | $\$ 1,826$ | $\$ 5,044$ | 273 |
| Cash (net) | 255 | $(68)$ | 266 | 54 |
| EBIT (LTM) | 105 | 1411 | 224 | 15 |


| EV | 1858 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EV/Sales LTM | 1 | 1.3 | 5.2 | 0.5 |
| EV/EBIT 2005 | 13.3 | 11.5 | 16.5 | -32.3 |
| EV/EBIT 2006 | 11.2 | 10.4 | 13.5 | 11.7 |
| Concepts | ANN 359 | Misses 519 | Chico's 511 | J. Jill 150 |
|  | Loft 343 | Pettit's 286 | WH/BM 167 | 150 |
|  | Fact 36 | Add Stores $112$ | Soma 167 |  |
|  | 738 |  | 688 |  |
|  |  | Outlets 24 $1049$ | Super loyal |  |

A couple of others that cater to older women are Chico's and J. Jill.

At first glance you may look at EV/EBIT (13x or less than $7.5 \%$ pre-tax return) and think that it is not cheap. And probably if you stopped here you would not buy it. But I think it is one of these things you have to delve a little further to understand why it may be potentially interesting. Again the numbers don't look very cheap. If I said to you which one would you buy? The answer would be based on this would be NONE of them because none of them look cheap. Certainly you might even look at Chico's and say you would want to short it. That has been, unfortunately, one of the best performing stocks over the past ten years. Lots of people have lost their shirt shorting it. J. Jill will lose money. J. Jill will lose money and this year is a turn around year for them. 2006 is really a made up number because nobody knows if they turn it around, where they will land. That could potentially be an interesting story to look at because there is enough opportunity, but I don't think it is cheap enough.

Student: What is the story with Chico's - Why has it performed so well?

LG: They are great operators and they have really found their niche. Anybody know anything about Chico's?

Student: They cater to $\qquad$ and it is a growing demographic and it is an underserved demographic.

LG: They have done a great job at creating a super loyal customer base. They have grown their core concept relatively slowly. They have honed in on their core customers and created a very loyal customer. There is some growth there. WHBM is White House Black Market which is a new chain
that they have launched and there is growth left there. These people are good operators. You don't want to get in their way.

Talking about $A N N$ at first glance it doesn't look cheap. Looking at the bottom of the table we are talking about concepts -growth opportunity-in their core concept they are at 359 stores. They probably get to the 400 stores level because they would max out their store base because they have a higher price point. One of the nice things there is that they launched Loft about five years ago and it is almost matching the size of $A N N$ and they could more than double their Loft store base from where they are now because they are at a lower price point. And they have a lot of street locations so they are not just limited to being just in malls. So despite ANN and TLB looking similar, I could tell you that $A N N$ has a lot more square footage growth potential over the next five years than $T L B$.

Why didn't Talbot launch a distinct concept? The truth is at 1150 stores they will max out on their square footage potential a lot sooner than $A N N$ is going to max out.

So why do I like $A N N$ ? Ann is one of those stories where everything they could do wrong in the past year in 2004, they did. In Christmas like Eagle, a year ago they were basically giving everything away. And what has happened now is that there have been some mgt changes that have taken place. Management is trying to get the ANN Taylor core chain back on track.

What I will tell you is in this same timeframe LOFT which is about half of their store base has done extremely well. Now mgt. won't break out margins for you between the two concepts but I will tell you that my guess is that they are at least in the $11 \%$ to $12 \%$ operating margin range. As you will see from what $A N N$ did in 2004 that means the ANN Tay/or chain must really be doing lousy if they half the chain is doing $12 \%$ margins. So you have lots of opportunity (for improvement).

I only went back to 2002 here, but actually $A N N$ s peak EBIT margins were north of $12 \%$ and that is even low for the industry. Like ABERCROMBIE (ANF), which we looked at earlier, you can look at this and say lots of opportunity here based on what they have done historically. They did $12 \%$ operating margins when they only had the core ANN Tay/or concept. Well they went from $12 \%$ to 6\% margins, but has there been a fundamental shift in the business? What has happened?

JG: Right now this is like a special situation. The good business can double in size (LOFT concept) and the bad business has done a lot better in the past so you can earn a lot more from the bad business. You can double the size of the good business. The bad business is masking the good business. You have a lot of plays.

LG: The stock has gotten hammered. It has come back a little bit off its lows. We were buying it in the $\$ 21$ 's. It is now up to $\$ 25$, but I still think there is tremendous upside because if you just take a
look at what Street Estimates are for this year and next. They (Wall Street Analysts) are assuming very little gets fixed on the ANN Taylor side. The point being is that when you are looking at those EV/EBIT numbers that didn't look that great--those analysts' numbers are really based on low estimates. Nobody is going out on a limb; nobody is putting back margins to $10 \%$ to $12 \%$ in 2006. But look at the numbers, if they (mgt.) do reach $10 \%$ to $12 \%$. Look at what happens to the stock if they can get their business fixed.

They can go from the assumption of earning $\$ 1.50$ per share to north of $\$ 2$ to $\$ 3$ the following year assuming if they can fix these business. I think 10\% operating margin or $12 \%$ operating margin one to two years out is realistic. Even knowing nothing about this company it is realistic based on what they have done in the past and what their competitors are doing. Even if you don't know much about their business and who this new management team is that is coming into place and what their new merchandising initiatives are, you can still look at the historical record of their company. What you can analyze is where has this company been and where does it have the potential to go if they do get it right. Is it trading cheap enough so that if they don't get it right will I lose my shirt? The answer is in the mid 20's you have a couple of points down here, but you have a lot of good upside--\$3 or \$4 downside for $\$ 30$ upside.

| Ann Taylor Stores (ANN) | 2006 | 2007 |
| :--- | :---: | :---: |
| Revenues | $\$ 2,482$ | $\$ 2,854$ |
| EPS | $\$ 2.17$ | $\$ 3.00$ |
| Pre-tax Income | $\$ 253.7$ | $\$ 342$ |
|  |  |  |

## SLIDE for Price projection? (missing)

One of the ways to look at it when we looked at ABERCROMBIE (ANF) and Eagle, is to ask where do these things trade when they get it right? And as we said it trades at $17 x$ to $20 x s$ when they get it right. You know I don't want to assume a 20 multiple-the absolute top. Let's be conservative and say that it trades at $15 x s$, and people see in the coming year that the $\$ 3$ in EPS is a reality, then there is a possibility for a $\$ 45$ stock price from $\$ 25$ with $\$ 2$ or $\$ 3$ downside. I think that is a pretty good risk/reward.

Another way to look at it is to look out to four or five years and ask what potential type of build-out do they have? And what type of cash can they generate? And what will their earnings be at the end of that five years? So they can still continue to grow square footage in the $13 \%$ to $15 \%$ range over the next five years that just by opening Loft stores and a few $A N N$ stores not to mention that they talked
about opening a new concept. They have not made that public yet, but that is sort of a free play so we are not even counting the new concept.

|  | 2006 E | 2007 E |
| :--- | :---: | :---: |
| Stores | 938 | 1038 |
| ANN | 379 | 389 |
| Loft | 493 | 568 |

So just from the Loft and $A N N$ concepts we have got $13 \%$ to $15 \%$ sq. footage growth per year. So if we build it out to its potential and we assume that the company can get back on track and operate in the $12 \%$ EBIT operating margin range, the company at the end of the five years on the current store base--they would be earning $\$ 1.70$ instead of the $\$ 1$ they earned last year. So with the current store base the EPS is $\$ 1.70$, then with the additional build out in the $12 \%$ range adds $\$ 2.00$ so you get to $\$ 3.70$ EPS. They currently have cash of $\$ 3.50$ and if you build it out, they would generate another $\$ 7$ in cash over that 5 year period and that gets you to $\$ 10.50$ in cash. You get to about a $\$ 60$ stock price.

JG: Well, the basis of the exercise is you know how analysts just stick a multiple on it. Well it is growing at x percent so therefore it deserves this multiple. In retail if you sort of know the end game-not that they couldn't come up with new concepts-with the concept they have, you say this concept has 340 stores and they can go to 680 . If they have $12 \%$ margins, what will they earn? How long will it take them to build out to 680 stores? What net cash build will they have in the interim? Then you can put a slower growth multiple at the end. You can take a conservative number and you can put a $12 x$ at the end of four years. You get $\$ 45$, you have accumulated $\$ 10$ in cash during that time assuming they did not buy back stock or else you would get a bigger bump up. So you are at $\$ 55$ on a $\$ 25$ stock in four years. I think Linda came up with a $\$ 60$ stock.

LG: It is a compounded $17 \%$ annual return over the next 5 years ( $\$ 25$ to $\$ 55$ ).

JG: And if you remember our discussion last week. This one is very easy to see over the horizon. If they get back to $12 \%$ margins-it is not that they probably won't pay more for this-just because that is the way they analyze this. You have to do what you think is reasonable. Well that $17 \%$ annualized growth assuming they figure it out in two years, then they don't discount back at 17\%, they discount back at $10 \%$ or $8 \%$ and you will get back a lot of that income upfront. So it is possible to make $50 \%$ to $70 \%$ on this name in the next year if this plays out. Usually, what this plays out means is that it will be very clear that they will be able to build out the ANN Taylor Loft stores. If they can fix the ANN stores and get back to $12 \%$ margins while the ANN Taylor Loft stores are already there. Right? That is not so hard and you can figure out these numbers. And people might even tend to give out
higher multiples though we wouldn't. But you pick a reasonable multiple and discount back rather than try to guess at a multiple.

Analysts will say a company will grow 15\% a year-they may even be ending their growth 2 years from now so it is crazy to think of it as a $15 \%$ grower. It is really better to say, this is how far they can expand out the concept, this is what they will earn at the end of that, maybe they will come up with a new concept and we get a freebie—may be they won't.

Student: They did everything wrong? How do you gain confidence that they have not permanently damaged the business?

LG: The business fell apart in the second half of the year. They made some huge merchandising mistakes-it can happen to anybody. They have now gotten rid of the guy who was doing the merchandizing. They brought in the woman who now has been running Loft for the past five years and who has a great track record at that brand to run the ANN Taylorbrand. He (former merchandising managers) brought in the wrong merchandise, and he also was going to build inventories to $20 \%$ to $25 \%$ a sq foot. Not only did the merchandise not sell but it was acerbated because the manager brought in way too much of it (overstocked on poorly selling inventory!). Merchandising and inventory issues going on.

The nice part about that was management took a step back and now they have put in a much more disciplined planning and allocation process. So we will watch inventories go down. That is a big red flag when you see inventories go up particularly in the face in declining sales. So certainly you can certainly take the bet that they will manage their inventories better. The bigger question is whether they can get the merchandise right; that might take longer. But I am willing to make the bet with somebody who has the kind of experience that this woman has who is running Loft that they will regain their footing.

We have done research on $A N N$ Taylor Stores ( $A N M$ ) by going out to the malls and have spoken to their customers. This company has one of the most loyal customer bases of any concept.

JG: How did you do that? How did you interview customers?

LG: We spoke to those who had ANN Taylorbags and who didn't. We spoke also to people who walked into stores and who did not buy anything. We sent people out across the country to go to different malls. What you will find out is that what they are doing in NY may not be what they are doing in the Midwest.

You can also look at the competitive landscape—Although I mentioned Banana Republic and Talbot's--the nice thing about $A N N$ is that there is no one else doing exactly what they are doing in the specialty store format. There is nobody else who caters exactly to these kinds of customers. Talbot is a much more conservative customer. Banana is more fashioned forward, younger customer, so $A N N$ sort of has a really nice niche. And the beauty of it is that their customers keep coming back and keep waiting for them to get it right because they have nowhere else to go really other than Department stores and people for the most part are not in love with department stores and department store shopping. $A N N$ has a lot of leeway in terms of having the time and ability to get it right because these customers will keep coming back.

There are twofold ways to win: improvement on their inventory issues and their customer base (will give them time and ability to improve their situation).

JG: By the way, We used to own 10\% of Chico's about 8 years. I don't know how many times the stock has split since we owned it at $\$ 4$, so we have owned it at the equivalent of a $\$ 1$ and now it is at $\$ 28$. We got out at even as opposed to making 28 times our money. The one thing we were holding this thing for was that when you talked to their customers they were the most loyal people-things at the stores were horrible-they kept coming back hoping it would change. We lived through a few seasons. I was young and stupid, so we took a big bet on a retailer. The loyalty of the customers was what really came though. They finally got it right, they brought in the original people who had started the chain and they turned the thing around. It is the type of thing that can happen here. So if you have loyal customers like $A N N$ and they have their own niche like Chico's. If I had hung on to Chico's $\qquad$

LG: I walk in and think that this stuff is ugly, but their customers love the store. If they do get it right, then there is huge operating leverage.

Student: How bad did they get it in their merchandising?

LG: They were over assorted. They had one type of sweater in 20 different colors. They were poorly merchandise on the floor. They had a pink pair of pants together with a pink sweater. They have had a revolving door of merchandising managers.

Going back to the cannibalization question about this company. If there is anybody who knows who this company is trying to cater to for each of their concepts it is this woman. She will do as much as she can to differentiate the two chains to make sure they are dealing with separate customer bases.

Student: You think that there is limited downside to $\$ 21$. How do you get to that $\$ 21$ number?

LG: I have to believe things will get a little bit better than they did this year (2004). And certainly with their inventory problem I am confident that they will not make the same mistakes there. So I look out a year or two and I say and if they are not doing great things with the business but Loft continues to hold its own, then this at least deserves at least a 10 multiple so they have $\$ 3.5$ per share in cash so if they can continue to grow the store base, even if they don't even do it well, they can still earn $\$ 1.60$ to 1.70 range. Put a 10 multiple on that for $\$ 16$ or $\$ 17$ and add in the $\$ 3.50$ in cash for approximately $\$ 19.50$ to $\$ 20.50$. What is nice about this is that there have been takeover rumors so that has held up the bottom for the stock.

If they continue to do not such a great job, and I put a conservative multiple on it, where is my downside? Where can it trade? It could trade down to $\$ 20$.

Student: Do you short?

LG: I don't short based on valuation. The sky is the limit when people are excited about retail stocks. It has to be a fundamental issue with the company. Like a fundamental shift in the competitive landscape. This company has been able to generate the kinds of returns that they have because no body else was doing what they were doing., but then all of a sudden new competitors start coming into their niche. Meanwhile the company is trading at 40 times, but it may take a while for things to play out for the short.

Student: How so you talk to customers?

LG: I send people out to talk to customers. But people are happy to talk about their shopping experience. We have people who take surveys-what do people like and don't like. People are happy to talk especially loyal customers.

Student: how did you get to $13 \%$ to $15 \%$ growth in stores?

LG: That is what the company told me. And I look at where they are today; how big the stores are, how many more they can open, multiply that and I know how many stores they will open. So I can calculate how much growth the new amount of sq. footage will be on top of what they have now. That is an easy number to figure out because they will tell you and you can do the math.

Student: Look out how many stores they can open and assume some time scale for when they open those stores. Then back out the rate. What is the niche?

LG: It is women's wear for predominantly 35 to 55 year old women who are not super fashion forward. A lot of it is wear to work fashion but it is not super conservative. Pant suits. They have
floundered on the casual side. There is an opportunity there. Talbot's has a much more conservative customer, and it does not offer a lot of wear to work clothes. Banana offers a couple of suits but its customers are more interested in trendier, more fashion forward merchandise. There is not much serving the middle of the road customers. (ANN has a unique, underserved niche).

## END

## Greenblatt Class \# 8:

## Oct.

## 29, 2003

A guest, sister of Joel Greenblatt, Linda, runs a fund focused on retail stocks. Earning a return in the high 20's. There are several hundred retail stocks to choose from.

It shows how well you can do if you focus on your niche by staying within your circle of competence.

- Analysis of competition
- Whole consumer sector
- Retail - monthly flow of store sales. Frequent information flow.
- Same store sales comparison
- Store growth and ROIC of stores.

| Companies | ABERCROMBIE <br> $($ ANF) | AEOS | PSUM | WTSLA |
| :--- | :---: | :---: | :---: | :---: |
| Cash | 400 | 209 | 80 | 90 |
| EBIT | 322 | 128 | 89 | NA |
| EV/EBIT | 7.7 | 7.5 | 11.8 | NA |
| P/E | 13.4 | 15.8 | 24.8 | NA |
| EV/Sales | 1.6 | 0.6 | 1.2 | 0.5 |
| Net Cash/Share | 4.0 | 2.9 | 0.76 | 3.04 |
| Total Stores | 672 | 912 | 855 | 622 |

$A E O S$ is going more into lower class malls than $A B E R$
What is growth potential?

All these companies have a cash balance. When you look at P/E, you might want to take out cash and focus on their earnings on operations.

Understand concept, customer base, location, know price point differential. For example, a sweatshirt at Abercrombie will sell for \$35-\$40 versus \$25 at Eagle Outfitters.

ABERCROMBIE (ANF) is at $\$ 28.80$ (as of Oct 29, 2003) and it has $\$ 4.00$ in cash, so $\$ 28.80$ minus $\$ 4.00$ in cash $=\$ 24.80$ divided by earnings of $\$ 2.50-10 \mathrm{x}$ multiple.

Where these concepts can go depend on where the stores are located. The core Abercrombie concept has to be at a better mall. 700 A Malls, 800 C Malls.

Is concept maturing? What new concept is coming next?
ABERCROMBIE (ANF) will max. out about in about 400 more stores in A Malls. If ABERCROMBIE (ANF) does not have growth potential in its core product, what are they doing now to grow?

Hollinger-is there a new concept for ABERCROMBIE (ANF). Their growth is slowing.
Nautica: an apparel company trying to be a retailer. A failure.
How to evaluate Brand value? A good question. ABERCROMBIE (ANF) was once hot--they could sell anything at full price. That is not sustainable. Never try to value a company four or five years out based on popularity.

Get an understanding of where these companies stand today. ABERCROMBIE (ANF) is in the best position today. Their core concept is old, but they introduced Hollister which is very hot. Abercrombie Is more east cost concept and Hollister is more of a West Coast Surf concept. Hollister has 150 stores so it has good growth potential ahead of it.

Retaliation? Price War? Does Hollister take business from Eagle? Is there room enough for everyone? Eagle has been running negative comps. Eagle was knocking off everything from Abercrombie. And selling it for $30 \%$ off. Then that strategy stopped working.

Eagle has tried unsuccessfully to buy into a new concept while ABERCROMBIE (ANF)'s mgt. has successfully introduced an organically conceived concept. Eagle bought an established name in Canada and has destroyed it.

Are they trying to go after their same customer base and cannibalize it? ANN Taylor has introduced Ann Taylor Loft and people can pay less for the ANN Taylor brand--so people are confused.

What happens if a brand is not as hot as it once was? ABERCROMBIE (ANF) vs. Eagle, mgt has marketed well. ABERCROMBIE (ANF) has done a good job at maintaining margins.

ABERCROMBIE (ANF) has been anti-promotional. High standards of pricing and have maintained the integrity of the brand.
(Joel Greenblatt: A lot of the opportunity works better with smaller stocks).
ABERCROMBIE (ANF)'s Mgt. has improved their merchandise margins. They manage it very scientifically. ABERCROMBIE (ANF) has maintained numbers very well.
A company won't promote haphazardly.
It is tough to analyze one store unless you go to the same store three times a month and you look at the inventory and break out the inventory.

This is the typical analyst report: what is happening to comparable store sales. Is it relatively important that they get back to their high comp store sales growth--no, not to me, if they are making good money on their stores and there is growth and it is cheap enough. Hollister is doing well but comps are down. It doesn't thrill me, but it is not important in the big picture.

Do I care what they will do in October, if I am holding for three years or more.
Comps are down $3 \%$ but they earn returns on capital in the $60 \%$--a good investment. Sure the ROIC is not as great, but it is good enough depending on the price.

Take advantage of Wall Street's fixation on same store sales. Look like they have a lot of debt, but what they are on the hook for is the current market value of that store and the difference in what they owe. Knowing where you are in the retail cycle. Also, know the concept cycle.

Take out rent expense from income. There is a lot of debt. Note the current market value of real estate vs. what the stores owe. ??? Factor in lease expense and make it part of the debt.

A quick and dirty on valuing $A B E R C R O M B I E$ (ANF). What is the potential build-out in their concept? ABERCROMBIE (ANF) @ \$350/sq. ft. sq. ft. growth potential \$100/ABER

500 more stores for Hollister for a total of 3.2 million sq. ft. total 4.1 million sq. ft. @ $20 \%$ margin $=\$ 1.80$ EPS, $\$ 2.50$ then $\$ 4.3$ with a 12 multiple ( $15-20$ multiple for comparable stocks in retail) $=\$ 52$ and with 20 x $=\$ 86$. Then add in expected $\$ 10$ per share in cash to grow in addition to current $\$ 5$ per share in cash--thus $\$ 15$


I get the fourth concept for free. The stock is now at $\$ 29$, and then take out 5 per share in cash for $\$ 24$ current price for $\$ 2.50$ EPS or 10 xs .
$\$ 4.30$ EPS in 4 years x 12 P/E multiple $+\$ 15$ per share in cash $=\$ 67$ in five years, so $\$ 29$ to $\$ 67$ is $17 \%$ compounded growth over 5 years.

I hope they can continue what they are doing now. They have 20\% margins. \$4.30 EPS--4 years out.
Joel Greenblatt: At some point people (the mkt.) wakes up and the stock goes up more than $17 \%$ per year. The price does not go up in a steady manner. $19 \%$ in one year

ABERCROMBIE (ANF): $\$ 1.80$ they earn in this year.

Base case for ABERCROMBIE (ANF) without growing the business is paying $\$ 29$ today with a 10 x multiple for $\$ 2.40$ EPS and ( $\$ 29-\$ 5 /$ sh cash). You have room for more than 100 ABERCROMBIE (ANF) stores and 500 more Hollister stores. On the additional stores, ABERCROMBIE (ANF) will earn more $\$ 2.50$. Netting after capex. and new store capex. you are netting $\$ 2.00$ per share and after five years you have an additional $\$ 10$ per share to add to the $\$ 5.00$ per share in cash. There are things you can do with the cash like buy back stock (adding value to this scenario).

Lumpy returns: year 1 ABERCROMBIE (ANF) goes up 19\% to \$48 then 9\% annualized return for 3 years.
Hope for stellar, faster returns.
Assumptions: growth and margin of safety.
For Margin of Safety: Leaving out other good things that can happen to ABERCROMBIE (ANF):
ABERCROMBIE (ANF): We get free--the fourth concept. The margin of safety: we left out all these other possibilities. We have room for error.

Important: comp store sales. Further leverage their operations: better sourcing, etc.
Wall Street focuses on the wrong metrics. Comp Store Sales and P/E Multiples vs. growth of the business overall vs. comp. Store sales. What is in total build out?

## Forget slapping on multiples on growth rates.

Judge quality of management
ABERCROMBIE (ANF) focused on margins. They take a strict anti-promotional stance. They haven't slashed prices. Mgt. may panic and slash prices when a concept begins to age. They may sell goods at a discount.

Linda: Look at total build-out of stores. What will they make? Study each of their 3 different businesses. Do a sum of the parts analysis. KEY!

An 8.5\% after-tax yield--I am comfortable with that.
Simpler to do a total build-out for five years, what are margins with additional stores? Get the methodology instead of slapping a multiple on it.

ABERCROMBIE (ANF) is improving Gross Margins and Maintaining Operating Margins. Open and closing stores. .

Break-out the new store Capex. and old store capex. ABERCROMBIE (ANF) does a good job allocating resources.

ABERCROMBIE (ANF) can improve sourcing, pull costs out and increase merchandizing margins.

Keep a close eye on mgt managing the company as a business? CEO has a big options package. ABERCROMBIE (ANF) rarely misses a number. They buy goods on sale.

A hot concept is when goods sell at any price.
Analysts say comps are down so stay away, they don't focus on the big picture. Now the stock is a double.

Focus on how much cash is generated over the period.
There could be an opportunity for Wetseal. Why are margins down? Opportunities with low margins-turnarounds.

The guy running Gap came from Disney and he has identified parts run poorly. Function of a poorly run business.
Where are the problems to be fixed and are the problems fixable?
Today, it is tough to find buys. Little value to be found in the market.

## Look at absolute valuation.

ABERCROMBIE (ANF) and Eagle show the same EV/EBIT but normalized EBIT is better for ABERCROMBIE (ANF) vs. AEM. ABERCROMBIE (ANF) has better growth potential and management. Better normalized earnings for $A B E R C R O M B I E$ (ANF) vs. trailing earnings.

Look at normalized EBIT.

## END

April 13, 2005

## Greenblatt Class \#9

6:30 PM Conference Call on Monday for questions to prepare for the exam.
In addition after our special desk: we will have three short presentation and we will talk about portfolio management.

Introduction: A top performing hedge fund manager that my partners who have gotten to know.

## Matt Mark of Jett Capital. Distressed Investing

He started at risk arbitrage at Bear Stearns. He is an exceptional investor. He does distress investing.

## MATT MARK:

I want to talk about three things.

1. The type of analysis used in distress investing.
2. What distress is-there are different skills involved than value investing in general
3. Third, we will talk about two situations.

I started Jett Capital with $\$ 20$ million three years ago in 2002. We have a little over $\$ 300$ million now. We do venture investing. Look for value situations with some catalyst or some reason to think that the value will be realized. Why the situation/investment might get better.

I like distress investing, because I don't think we are in an environment of very robust investor returns. Where there is complexity and it is hard to understand there tends to be more value all things being equal. Warren Buffett (WEB) has this saying that you don't get paid for the degree of difficulty in your investment. I strongly agree with that. But I find that if it isn't difficult, it is hard to find good investments in today's environment. That is why we focus where we do.

Let us talk about distress in general.
A definition: buying a fixed income instrument at a discount at par. What kind of skills do you need to be a good distress investor?

Know the procedural and legal knowledge to understand the bankruptcy process in the distress market.
What else? Other than the bank and legal processes? The ability to value the business and you need to be able to find value and be a good investor.

## What is needed to be a distress investor: legal and procedural knowledge of the bankruptcy process, valuing assets and companies and being a good investor.

Focus on different areas than what you have looked at. Distressed investors focus in bonds-as an investor in bonds my concern is: will I get paid back with an attractive return? Is this a credit play? That is where we will be focused. The other kind of distressed investing is receiving newly issued equity. Bonds will become a stock in reorganization.

Some people think that is less interesting than buying stocks. Bonds can become equity in the new company. We will talk of different rights and classes of stocks. In general, the more senior your bond, the greater your chance of being paid back. However in the event of a bankruptcy where the liabilities are greater than the assets, it means you will have a higher likelihood of being paid before the less senior securities.

What are the skills you want as a distressed investor? Temperament is a quality that is an important part of all types of investing. Being willing to act on the financial analysis and why every day is a struggle.

There is a certain amount of negotiation involved. There is a real deal making element to being a distressed investor.

When you have claims in a company that might not pay you back, then your interests may not be aligned with other creditors or investors.

Like a lot of investing distress investing is often cyclical. It is driven by Supply/Demand cycles. Sometimes there is a lot if distress investing. Other times the economy is weak and people are scared, so demand for distress goes down.

These are two different points in the cycle-the first is when distress was in big supply-shortly after Worldcom, Enron.

## Examples of Distress Investing-See Hand-Out

TFF is a Mexican company run by a family. They have a control position in the equity. TFM is the largest Rail Road in Mexico between US and Mexico. They own $51 \%$ and they have two minority shareholdersMexican government and Kansas City Southern.

Let us talk a little about the situation at the start of the case. It is March 2003-this is what the balance sheet looks like.

A: the Rail Road—what is it worth?
Other transportation assets. I am using dollars because this is an ADR.
Then there is cash.
Liabilities: there are two series of notes: $\$ 410$ million
Other liabilities. Here is where seniority gets to be important
Trade claims and bank loans are senior to you as the note holder. The bonds are publicly traded. There is a little bit of senior debt.

What is the problem here? You are the CFO and these notes: $\$ 177$ and $\$ 200$ million notes are due in May 2003 or one month. You don't have sufficient cash. Why would the 2003 bonds trade higher than the notes to be paid later? They get paid back first. The 2006 notes have less chance of being paid.

Let us think about the notes for 2006. That $\$ 200$ million is now in the market trading at 180 million. As a bondholder you are asking: Are they going to pay you back and can they pay you back?

The CFO is asking what they can sell. $\$ 100$ million in assets that have a lot of small assets so it is tough to sell it fast.

They decide to sell their interest in the Rail Road for 470 million dollars. $\$ 940$ million worth in equity based on KCS's offer for part of the equity. There is a billion in debt on top of that so EV is $\$ 1.9$. Is that a good price for its RR? Is TFM getting a good price? They are getting $7.5 \times$ EBITDA. Is that a good price? Other transactions. If you really wanted to do a valuation, the financials would help.

Is this a good CF business? No, it is a RR. It is a decent RR. It is a monopoly in its territory. Truck goods can be competition. When I think of 7 to 8 x EBITDA, 30 times trailing FCF--that is a good price considering a CFO has looming liabilities.
Who else would buy this? If you own $51 \%$ of this can you do whatever you want with it.
The company announces that it will sell the RR to KCS. But it will take time for the process to go through the regulatory process.

Hey you 2003 note holders, we have the assets to pay you, but we need more time to get you the money. Let the deal close. Give us more time. We will do a tender offer for your notes and give you new notes due in 2006 (not 3 months) and more security. We will give you more interest.

Choice number 1: Give us your bonds.
Choice no 2: File for bankruptcy. What does filing mean? The company files for bankruptcy.

What are one of the problems of bankruptcy? The judge is in charge of bankruptcy. I, as a bond-holder, don't know what the judge will do.
There are some technical influences too. You may not be able to own defaulted debt if you are a mutual fund money manager. Bankruptcy is very disruptive. Customers leaving and employees leaving. Real value destruction.

The company can file for bankruptcy. Stigma, the company can be hurt by it.
Choice 3: The threat of bankruptcy—OK fine, I will take my new bonds. The CFO could raise money from other sources and repay the note holders.

Let's say I run a hedge fund and I show up May $18^{\text {th }}$ and you show up and say pay me. As we got to May 15 then $40 \%$ to $30 \%$ note holders who held out. The people who were holding out was going up and down.

It is in everybody's interest to tender, but in the individual's favor not to tender. Holding out is unethical. Reputational effects for Jett Capital are important.

If everybody did it, then we couldn’t manage the company. You don't want to be known as someone who pushes companies into bankruptcy.

This is how it works: read the company announcement. The company goes to a local judge to prevent the repayment of debt.

The company recognizes the obligation but says it won't pay you back. On May $13^{\text {th }}$ an injunction preventing debt holders from forcing the company to pay back its debt. The company added debt in a bubble environment.

On May $13^{\text {th }}$ the management is in my office saying to buy back our bonds so we will be fine. At the same time they were in a local court trying not to pay back the debt. So as an investor in public markets that when companies have material information they should tell me. They did not tell their investment banker, Salomon.

When you read that, you ask what else could be wrong? Mgt. specifically lied to you.
This is an important part of the process. The bonds go from $\mathbf{9 0}$ cents to $\mathbf{6 0}$ cents. Scary. This is when I buy.

But buying the bonds at 60 cents was a no-brainer. It may have been contrarianism. In a sense, I will do anything for a price.

Both bonds default to the 5 cents difference between bonds go away.
I own the business at a value of $\$ 245$ million dollars and there is asset value of $\$ 631$ million. At this point who knows what will happen. He is buying a 40 cent dollar-assuming the assets are good.

Based on the work that we had done, buying a $\$ 630$ million value seemed good.
What do you want to know now? You want to know about the asset values. Who would you talk to? Talk to the advisors to the transaction.

I could file (to put the company into bankruptcy) in Mexico or the US.
Talk to the US Secretary of the Treasury. We wanted to know if the financials were good. They had minority shareholders who had an active interest. The mid-level management was not happy. At 60 cents what I was risking was fraud? There was cash on the balance sheet. I had no idea of when I would be paid back.

I pitched this to other fund managers. One money manager replied, "There has to be something better than buying Mexican bonds." That thinking is why these opportunities exist. But because people think that way is why the bonds are so cheap despite having 2.5 times the assets values to cover the debt.

To the extent we try to figure this up. Another press release, "We grew our rail road." The new judge on May $23^{\text {rd }}$ that nullified the prior judgment. Irregularities could have taken place. There was concern that they might have bribed the judge. It changed the dynamic.

Now it was clear what our options were. We have bought. We could sell our bonds or push the company into bankruptcy. Who can influence the outcome? Mgt. and the other minority shareholders-the Mexican government and KCS. And the senior claims holders and other bond holders. The bond holders can organize. If the bond holders had organized, perhaps then this problem might not have happened.

Why would you organize? Leverage for being well represented before the company and/or a judge. Nobody wanted to go before a judge.

Let us think about organizing. TFM decides not to do the deal with $K S U$. There was little talking going on during this time.

So what do you want? You are the biggest bondholder and what do you want? How will we get our money back?

There are two ways to be paid back: 1. cash and new paper or 2 . Owning the company.

## Owning the company.

I am buying at $\$ 230$ million for the company. At my price then, there is $\$ 150$ in equity and all the debt is $\$ 950$ mm for 1.1 billion. $\$ 250 \mathrm{~mm}$ in EBITDA and I am paying 4 times EBITDA and it trades for 7 to 8 times. So I really have a 50 cents dollar.

This RR is better than some of the comparables. Why wouldn't we want to own the RR? Mexico would not want us as New York Hedge Fund managers to run the rail road, and it is not what we do. So we can't own it.

So how do we get paid back? Can we force them to sell it? Why do you think the company is reluctant to sell? The equity holders' stock is down $90 \%$. The public valuation is $\$ 400$ million. If the equity holder sells, he won't get a good price. I would get paid back though.

What type of skills are needed here? - the conflict between me and management and KCS is big here.
KCS's CFO—what would he do? He does not want to file bankruptcy in Mexico because they do business in Mexico. Corporate relations.

Bondholders explored every avenue. We got new notes which were a lot better than the prior offer of new notes. We got higher interest rates and higher security and a guarantee to sell off the RR and a warrant interest. We paid management to accomplish the restructuring. The new paper traded at 80 cents on the dollar. 1.2 times 80 cents equals 96 cents. A double in two months.

## Despite the paper flying back and forth and the threat of bankruptcy, the asset values never really changed and we bought in at a really, really low price.

Figure out the motivations of the other players:
Money managers who work at Mutual Funds-their compensation goes up if the bonds go up that year. More money on the assets they manage.

On the credit committee: You can't trade. A lawyer can tell me that I am fine, but I am not fine. If the SEC calls, would you mind telling the person from the SEC what you did. Would I feel OK?

Most of the guys who held on where the high yield managers. Mutual Funds are a different business than Hedge Funds.

One point on Elan Pharma. Their big product was recalled. Early to mid march the drug blew up. Model 1 with the drug and Model 2 without the drug and burning through cash. It has 1.5 billion dollars in debt and $\$ 2$ billion in debt.

The bonds were at par and fell to 85 cents. The biggest point I try to make-what is mgt incentivized to do? When you think about the values you are buying at. This deal is not as good as the Mex. RR. Because the market is so rich, they are shooting for a $15 \%$ return. Is this worth it? This is not Mexico and immoral behavior, but it is Biotech and the reward is much smaller.

## Joel Greenblatt Notes

## Bond Yield of 6\% Used as a Comparison

When I talk about the 10 year bond yield of $6 \%$, I am talking about after-tax yields. I am not comparing that to EV/EBIT - it is almost like EPS here.

P/E ratio of 16.66 that is what I am comparing to a $6 \%$ bond yield.

## Cash Flow from Operations: CFO

CF from operations includes changes in working capital. Sometimes they are a one-time change in working capital. What we have been using is EBITDA minus MCX or EBIT as a euphemism for EBIDA - MCX. Clearly each business is different, but by just taking CFO you don't know if there is one-time liquidation of inventory or one time need for stuff. Sometimes it is accurate but sometimes not for figuring out normalized earnings.

Look at insider selling if they sold at higher levels.

## Presentations: World Wrestling Federation

Their sales are way below so their brands or other things are not helping them expand. They are spending money to grow but not making much money. Here your sales re $30 \%$ below normal or below your competitor, Neiman Marcus.

It is not easily fixable. This is a value trap. No easy fixes while they expand.
Their EBIT last years was $\$ 100$ and spending 16 million on expansion. You are not getting adequate returns on capital despite it being cheap on a multiple basis. I need to look carefully at their business model.

John Petrie (Joel's' Partner at Gotham Capital): This company doesn't have a credible EBIT margin normalization story to it. If you look back at 2000, they are at $6.8 \%$ EBIT margin when they were at half the size. Their margins have gone down since then, so there is no rationale for why the margins will jump back up with more competition. There is nothing explainable and reversible.

What is EV/EBIT? It is 7.1x for World Wrestling Federation. What is the valuation if the voting stock was not there? Let's normalize EBIT? Norm. EBIT (last was \$63.5) as a challenge to value it. Just big picture: I want to find out normalized earnings or EBIT. What is normalized EBIT and EV/EBIT and normalized EBIT/(NWC + FA). I would still do the valuation as if.......

Wrestling is cyclical or not cyclical. Two sides to valuation: what is the business worth? Then I can throw on the extraneous things like the mgt. will steal the EBIT or I won't have the EBIT.

Figure out normalized EBIT and Normalized ROIC. Then go from there.

There will always be moving parts, but that should be your base on every company. You can compare companies that way, you can always adjust because each company is different. This analysis is simple, but big picture it works. A lot of times you can't figure it out either by spending more time on it or passing.

## END

## Greenblatt Class \#9

## Portfolio Management

- We have spent the whole semester doing valuations and figuring out what something is worth.
- Then trying to buy it at a discount.
- We are passing on stuff we don't understand.

I also take the $W E B$ approach to portfolio management. How much to buy of each thing? How much risk you are taking in each one. There are all sorts of statistics in coming out with the best portfolio.

## Here is how I look at it:

You live in a small town and you sold your business for $\$ 1$ million. How do you invest it? How many ways should I divide the money? There are 40 different businesses in the town.

You would research the companies for the best businesses using the metrics we have learned, and then I have 15 businesses to put the money into. Owning a piece of a business in town. What would I look at?

15 good businesses ranked by cheapness, ROIC, etc.
How many different businesses would you want to buy? How many is prudent? $\mathbf{5}$ to $\mathbf{8}$ businesses.

I could put 20\% into each stock. People might say that such concentration is an unbelievable risk. I put a lot of work into valuing those businesses. Think about it in the context of a small town.
$\$ 125,000$ into 8 businesses. The way I look at-if I look at normalized earnings two to three years out unless it is a special situation with a catalyst-I am doing simple value investing. Mr. Market will get it right within two to three years). I may only need to find 2 or 3 businesses a year to keep a 5 to 8 stock portfolio going over time.

## If you own a piece of a business, then you view things differently than traditional portfolio management.

I would rather have 5 to 8 positions in businesses that I understand well that I have valued and that are priced below value (big discounts). I feel good that I have such a margin of safety that I won't lose much.

I look for investments that I think I will make money but if I am wrong I won't lose much because I have such a margin of safety. You can always lose money in the short run, but if you get your valuations right, you are buying 60 cents dollars and you can wait two or three years, then all those things have to be there. The reason other people don't look at it this way—Rich Pzena was here-he buys cheap (a logical strategy for me). He started out and way underperformed the market. Stick to your guns. He now has one of the best records on Wall Street. Many people can't stick it out. Most say they can under-perform as long as everyone is underperforming.

## He stuck it out and became successful.

It is very hard to do in real life. This is the one that makes sense. Most people can't do this. Adam here in class is thinking of having 10 positions because he is a conservative guy.

In a special situation there are opportunities where you can lose $100 \%$ of your money, and then you do not put $20 \%$ of your portfolio in it.

Buying a 70 cents dollar because it will grow over time. The reason I pay a 70 cents for a dollar in the future is if I have a strong conviction to earn a $\$ 1$ in two years. I take a certain $20 \%$ vs. a maybe $40 \%$. Evaluate each situation separately. Obviously, your position size has to be adjusted.

## Think of the big picture when you think of portfolio management

If you keep the small town idea of dividing up your portfolio and keeping a long-term horizon, then you will concentrate on your best ideas. That is not the only way to make money but it has sure worked well for us.

If you take half your money and use a 20 punch-hole card, you will do the best in the class.
End

## Greenblatt Review Class

April 15, 2005

On the Exam: You will get financial statements and some comparables--enough to come to a conclusion. Do a valuation. Do capex correctly. You will view subsequent quarters and see what happens. How are things going for the company.

Bring a calculator. A real world exercise. You might want to review my book, How You Can Be A Stock Market Genius, and Thorton O'Glove's book, Quality of Earnings. You will see telltale signs on the balance sheet. That is about half the test.

There will be a question on options and risk arbitrage. Haugen reading. Questions from my book.
You will have hardball and softball questions. This exam is a very good test and learning experience.
The point of the class is not to show how little I know but what are the key things I have to know. Reading a lot of the footnotes and all these things are important. What are you trying to do is boil it down to a couple of concepts. Can I answer this question or not?

- Is this a good business (EBIT/(NWC +NFA)? Return on tangible invested capital?
- Can I buy it at a good price assuming normalized earnings (EBIT/EV)? High Earnings Yield?

What are normal earnings going to be in a few years? That means real cash flow, real earnings. Understanding future growth through competitive advantages.

Think about normal earnings in two to three years or whether those current earnings will continue to grow. How confident are you are in those estimates? Using those estimates to figure ROIC or EV to EBIT. Your earnings yield.

I hate to boil it down so simply, but that is what I use. If I don't have enough information to get there, then I pass. All I am trying to do is ferret out those answers.

You have to do a lot of research to get to normalized numbers. I made a lot of money doing special situations looking for no-brainers. As time goes on I have found ways to make money in different ways. Usually when you find something at 6 or 8 times earnings it is something horrible. Well the next year or two will stink but then normalized earnings will get better.

There are a lot of tests they can do but taking your blood pressure is the best indicator of your health or for your risk of a heart attack. What can I boil it down to for what I am looking for?

If it is so tough to figure out next quarter, then why am I confident over the next three years from now? That is what you are looking for.

## You are trying to figure normalized earnings two years out.

Well the market may fall or people worry about what happens next qtr? If you can cut through all the crap and focus on normalized earnings and whether the earnings will grow or shrink. Or is this a good business? It took me a lot of years to get here. It is not as simple as it sounds. I am sure you have learned a lot of sophisticated stuff in other classes. There is a lot of information out there. The WSJ has more information than the average person had in a lifetime in the $14^{\text {th }}$ century.

## If you can really pick your spots, it is simple.

Often times the guys running the business do not see the big picture while you are looking at a lot of different companies. You are looking at different companies in the industry. This kind of business will trade at higher multiples. I have seen a lot of businesses and ROE and growth streams deserve to get high multiples but it is not trading there. You have to be right more than you are wrong.

Matt Mark, he doubled his money in his position. But it was really about gamesmanship rather than valuation. So you have a good estimate of what this might be worth. If you do detailed work, keep the big picture in mind.

Why do you view EBIT rather than FCF? EV to EBIT. EBITDA - MCX or a pre-tax cash flow?
EV to EBIT is a euphemism. Changes in working capital need to be taken into account (if you use Cash Flow from Operations. You have to adjust those metrics to see if they are representative to the company. If there is a difference between earnings and cash I will use cash.

Based on assumptions. If I grew earnings $15 \%$ a year, then I grew the stock price at the same rate. (Analyzing stock buy back). In Duff \& Phelps, $8 \%$ to $12 \%$ to $20 \%$ CAGR assumption.

A guy who ran a Chemical Co. He wanted to buy back stock in his company. A picture of him pointing to the fence like Babe Ruth. That is a scary guy. At the end of the day, what was his game plan? He was buying back stock even though his stock was at a huge multiple on peak earnings in a cyclical business. Sometimes when things don't make sense, they don't make sense.

What we have been good at is avoiding errors of commission. We sold stuff too early, we have missed stuff. I think the key is to pick with confidence and be selective. You understand the business well. People question you on too short a time period

2 plus 2 is a powerful idea. You know it is 4 so no matter how many people tell you it is different. If you know the valuation, then these are the three things that are keeping earnings down, but they won't last. My favorite things are not ones that I am right on, but when I am wrong, I paid so cheaply that I don't lose. I get a decent amount right.
If you buy something and it only goes up, means you picked the bottom tick.
Use normalized earnings and it is trading at a 50 cent dollar, and then buys it. Don't wait. The school of hard knocks teaches you things.
The Short Side
The short side--unless the thing is going to run out of money it is very hard to hang in there.

I was long and short stuff with bad business models, 5 times overvalued, and running out of money, but it is very hard to hang in there. There are guys who do well shorting stocks.

## The market has an up bias and if you break even and the market is up $\mathbf{7 \%}$ to $\mathbf{8 \%}$ but you are not adding value long term.

The value stocks were going up while the overvalued stocks collapsed. There are some guys who can add value, but they are very rare.

Unless you value volatility, then shorting may not add much value. Make money in the long term. No matter how you add up all the numbers, it won't add value over the long term (long/short fund). If you look at small periods of time, then it is easy to draw the wrong conclusions. There is time when they both go against you. The notion you are only long $50 \%$ when you are $100 \%$ long and $50 \%$ short.

Another thing I have learned, the less leverage, the better. Because if you have the philosophy to be long term, you need to live to get there. You have to live to play another day if you take a long term horizon.

If you know what the right thing is, but your customers don't then you have a problem.
Sometimes these outside forces can effect you.
Student: How did you move into starting your own firm?
JG: I always knew I wanted to do what I wanted to do. I went to law school for a year because I didn't want to work. Then I went to work for a risk arbitrage firm where I was the flunky. I took that job for $\$ 20,000$ or a lot less than what MBAs are getting. I went to work for Michael Milken. I got interested in investing through reading Ben Graham. I read an article in Forbes. Ben Graham is mathematically oriented, so he finds cheap things.

Wharton Business School doesn't teach value investing. Value investing hit home. Sometimes it clicks or it doesn't. There are people where it doesn't click.

I was doing that and took a job at a risk arbitrage firm. It was like the Wild West. The one offer for $\$ 50$ for half your stock in the front end and $\$ 25$ on the back end for the other half. A front end tender offer. It might have made sense to tender the worse deal. The prorate date was ten days after. Some didn't know to tender their stock. I traded options at Bear Stearns. There were some deals- $\$ 50$ front end and $\$ 25$ back end or the deal is worth $\$ 37$ worth on average for the stock. You could buy the $\$ 37$ puts for a dollar; the options guys didn't understand the deal. So as long as the deal closed before the expiration of the option, then the $\$ 35$ put then became worth $\$ 10$. You made 10 times your money.

I thought the Ben \& Graham stuff could make you 25\% per year, but the risk arbitrage business was $100 \%$ a year in a bad year.

Then I looked at things that fell off the back of the truck and spin-offs. After doing this for three years I thought I would go on my own if I could raise $\$ 200$ million dollars.

I met with Michael Milken. I wanted what I wanted. I figured I should stick to my guns. So I can't say go replicate that.

A lot of it is being in the trenches for a couple of years. Making mistakes, seeing what can happen, seeing other people make mistakes. Seeing things you missed and you got.

The bottom line is you have to go do it yourself. Feel confident about getting going. Just get going. If I made $30 \%$ then I would pay my overhead, but at least I got going. If you run your own account, say $\$ 10,000$, run it like you are running a fund, but don't run it like you are running $\$ 5$ billion dollars. Run it like you are running $\$ 10$ million.

I see guys who raise $\$ 10$ or $\$ 20$ million but they run it like they are running a huge fund. They invest in big cap names. Take advantage of your size if you can. Take advantage of your ability to get into and out of things. I started in 1981 when the market bottom. I started in 1985. When I went to Wall Street the market had been flat from 1966 to 1982 or 16 years. You have a big leg up having gone here. You have a value perspective.

I know it seems simple and obvious to you, but the rest of the world doesn't know what you have learned.
Student: What did those people have that you backed? Or what makes them good investors?
JG: It is different things. What I liked about him was that he disagreed with me. Independent thinking is important. He has a very reasoned argument. He was willing to stick to his guns. A strong, well thought out opinion, and you are intellectually honest. Those are the personal qualities that I am looking for. Someone who thinks a little out of the box and they are not afraid to do their own thinking.

Just because I taught you certain ways, there are many different ways to make money.
Pick what you are good at. Everyone is different. You have this value underpinning and then you overlay it with your own thoughts. Linda Greenblatt understands in her bones, retailing. It is not what I do. She looks for value retailers. She stays in one sector. Most of academia would say what she does is impossible.

## Portfolio Management:

I truly look at it the way I described. If I can put my money in 5 to 8 businesses that I understand well and I can withstand the storm then why isn't that a good strategy? Looking at beta and volatility is a waste of time. If my returns are $30 \%$ and they bounce around, then so what.

If you look at Richard Pzena's portfolio-he is a deep value guy-his standard deviations in one year's time is more volatile but over three years time, then it is lower.
There is no relation between (near-term volatility) and being a good investor.
A pension fund he sits on the board of—if the endowment has a long term horizon.......END

## Greenblatt Review Notes

EBIT --- Earnings before interest and taxes (often called operating earnings)
This is what the company earns before worrying about capitalization (how much debt it has) and taxes.
Debt levels differ among corporations and therefore EBIT is a good thing to look at to determine the earning power of the company's business. Comparing EBIT/Sales of companies in the same industry might tell you how efficiently different companies turn sales into earnings.

Net income/Sales might not tell you this because net income is arrived at after subtracting interest and taxes. A company with a lot of debt will have a lot of interest expense. So, even if a company is operating very efficiently, net income may be low because of large interest expenses. Taxes may differ because of the tax shielding effects of debt or special circumstances like tax loss carry-forwards, tax credits, etc. which may not reflect operational efficiency.

## What is Enterprise Value (EV)?

EV is market capitalization (Price times shares/out) + Net interest bearing debt (Debt includes the current portion).

Why an investor should use Enterprise Value? Consider 2 companies--Co. A \& Co. B which are the same company. However, Company B has $\$ 50$ per share in debt (at a $10 \%$ interest). Company A has no debt. Assume the going rate for the earnings stream represented by $\$ 10$ in EBIT is $\$ 80$ (8 x EBIT) for company A \& B's industry.

|  | Company A | Company B |
| :--- | :---: | :---: |
| Sales | $\$ 100$ | $\$ 100$ |
| EBIT | $\$ 10$ | $\$ 10$ |
| Interest Expense | 0 | $\$ 5$ |
| Taxes | $\$ 4$ | $\$ 2$ |
| Net Income | $\$ 6$ | $\$ 3$ |

Question 1: If Company A trades at $\$ 80$ per share, let's figure out its P/E, Price/Sales ratio, EV/Sales, EV/EBIT.

Question 2: If Company B trades at $\$ 30$ per share, let's figure out its P/E, P/S ratio, EV/Sales, EV/EBIT

|  | Company A @ \$80 per share | Company B @ \$30 per share |
| :--- | :---: | :---: |
| P/E | $\$ 80 / \$ 6=13 \mathrm{x}$ | $\$ 30 / \$ 3=10 \mathrm{x}$ |
| Price/Sales | $\$ 80 / \$ 100=0.8 \mathrm{x}$ | $\$ 30 / \$ 100=0.3 \mathrm{x}$ |
| EV/Sales | $\$ 80 / \$ 100=0.8 \mathrm{x}$ | $\$ 80 / \$ 100=0.8 \mathrm{x}$ |
| EV/EBIT | $\$ 80 / \$ 10=8 \mathrm{x}$ | $\$ 80 / \$ 10=8 \mathrm{x}$ |

Company B's P/E appears lower and its price/sales ratio appears incredibly low. Since Company A and Company B have the same pre-tax, pre-interest earnings stream (EBIT of \$10/Sh) and since they are the same company, the different companies should really be worth the same thing to a buyer. (i.e. whether you pay $\$ 3$ for the company and owe $\$ 5$, or you pay $\$ 8$ and owe nothing, it is the same thing. (E.g. whether you pay $\$ 300,000$ for a house and assume a $\$ 500,000$ mortgage or pay $\$ 800,000$ up front. It's the same to you. You can pay the $\$ 800,000$ in cash or take out your own $\$ 500,000$ mortgage and be in the same shape as buying the house with existing mortgage).

The different capitalization skews P/E and P/S but EV takes into account the different debt levels and lets you compare the true earnings stream that can be leveraged by a buyer or not.

## What is EBITDA?

EBITDA is earnings before interest, taxes, depreciation and amortization. This is supposedly the cash that the company generates. Warren Buffett dislikes this number. Investment Bankers use this number to show how much cash a company generates that can be used to pay interest (because depreciation and amortization are non-cash charges). However, before you can use EBITDA to pay interest expense, you must pay those capital expenditures that are required to keep your business running at the current level. This is a cash expense. I call this maintenance cap/ex.

If instead of EBITDA, you use (EBITDA minus CAP/EX) you will get a truer picture of actual cash available to pay interest. This is closer to true cash earnings before taxes. Obviously, some portion of cap/ex may not be for maintenance (some may be for expansion), so you can either subtract just maintenance cap/ex (if you can find it) from EBITDA, or total cap/ex to be conservative.

Instead of P/E, I like to use EV/ (EBITDA - CAP/EX) to compare companies with different amounts of leverage.

## What is FREE CASH FLOW?

(Net Income + Depreciation + Amortization) minus CAP/EX
Net income is accounting earnings after subtracting depreciation, amortization, interest and taxes. Since D\&A are non-cash expenses, we add them back to net income to figure out how much actual cash the company generated. I subtract maintenance cap/ex (or total cap/ex to be conservative) to arrive at Free Cash Flow. Cap/EX is a cash expense. Maintenance cap/ex must be spent. So, free cash flow should represent the cash available to pay dividends, buy back stock, pay down debt or make acquisitions. These are things that take cash.

If you owned a business, you would want to know how much real cash it was earning. Some companies spend so much on cap/ex to keep up with competitors that they never really earn as much cash as net income indicates. (In other words, cap/expenditures are so large and continuing that, just to stay competitive, companies are spending all their reported income plus more to just keep up with competitors).

Textile companies and high tech companies may fall victim to this. Even a department store may have to do constant overhauls if competitors keep fixing up their stores every few years.

On the other hand, a company may be earning more cash than reported earnings. Often this happens when companies have large amounts of amortization resulting from acquisitions made at substantial premiums to book value.

## END

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## How Joel Greenblatt uncovers the secret hiding places of stock market profits? December-30-2005 by Brian Zen, Enlightened Investor Digest

An enlightened man turns on the "Light" in the dark hidden places. Joel Greenbaltt is such a man.

## Discovering The Hidden Places

Nowadays, many investors are reading Warren Buffett's wise teachings about investing only in wonderful businesses managed by talented managers. Guess what? They only got the front page of the picture. The flip side of the picture is that Buffett started by flipping thousands of pages of reports on unknown tiny "not-so-wonderful" companies in neglected hiding places, places that Joel Greenblatt has been talking about.

When Buffett bought American Express, it was a credit card business near bankruptcy, with its book value depleted by a fake-warehouse-receipt scandal. Most people thought the company's reputation was forever tarnished while loosing market share to rising stars like Visa, Mastercard and Discover... At that moment, American Express was a stinky stone covered in blood in an ugly place where my daughter would run away screaming: "Oh, smells terrible!"
value depleted by a fake-warehouse-receipt scandal. Most people thought the company's reputation was forever tarnished while loosing market share to rising stars like Visa, Mastercard and Discover... At that moment, American Express was a stinky stone covered in blood in an ugly place where my daughter would run away screaming: "Oh, smells terrible!"

But Joel Greenblatt, hearing the scream of terrible smell or bloody murder, would say: "Oh, really? Let me take a look." And there he would discover his kind of hiding places for stock market treasures. Those places are usually dark, ugly, and neglected. They usually don't smell too good.

Based on our proprietary research, enlightened superinvestors in financial history are all tireless at exploring unpopular stinky places and turning over countless ugly stones in the dark corners where nobody wants to go near. Joel Greenblatt is such a tireless explorer.

On Wall Street, many would stumble and fall at street bumps and cracks. Some would later find lost dollar bills and cigar butts beneath the exactly same bumps and cracks. In his book, You can be a Stock Market Genius (Even if you're not too smart), Joel Greenblatt generously provided a list of those hiding places of stock market treasures.

## Spin-offs

- $\quad$ Spin-offs are the favorite hiding place for Greenblatt. When a company spins off a subsidiary into a separate company, it may be trying to unlock the hidden value in an unloved baby. Greenblatt quoted a study that found a very large number of such spin-offs outperformed their industry peers by a surprising $10 \%$ per year in the first three years after the spin-off. What is more interesting is that the parents of the spin-offs also outperformed their industry peers by $6 \%$ during the same three-year period. Why? Because the unloved subsidiary had been a drag on the parent's stock, but there were hidden values in the neglected division.
- Institutional investors are often uninterested in spin-offs, as the companies tend to be small in size. The shares of the spin-off are generally not sold in an IPO, but quietly distributed among the parent company's shareholders. The shareholders often sell them off without regard to price or fundamental value as their primary interest is in the parent company. The initial price after the spin-off, therefore, tends to be depressed, providing a bargain purchase opportunity.
- Greenblatt stresses that in every corporate change it is important to determine where the interests of the insiders and directors of the company lie. If they have a large stake in the spin-off, it means that there is a high level of commitment to making the spin-off a success. The credibility and resources
- The subsidiary to be spun-off is generally some kind of unloved baby in the parent's family of businesses. GE would never spun-off its leading unites commanding a number one market position. The unloved and hated spin-off "bad boy" is often a drag on the parent company's valuation; in other words, the spin-off is generally not an exciting company or a good business.
- The to-be-spun-off company must file form-10 with the SEC. For the trained eyes, there is a lot of good information there to facilitate detailed research.


## Merged Securities vs. Merger Arbitrages

- Greenblatt likes merged securities and has mixed feelings about risk arbitrages based on announced mergers, that is, buying stock of a company that is subject to an announced takeover. Warren Buffett also acknowledges that merger arbitrage opportunities are disappearing after the strategy was made famous by Benjamin Graham and Warren Buffett himself.
- Risk arbitrages are subject to too many uncertainties like due diligence, antitrust approvals, multiple government reviews, shareholder disapproval, and changes of market condition, etc. Sometimes, the merger may not even go through. I call this "having your fingers burned while picking the pocket of corporate acquirers". The acquirer is buying for $\$ 20$ a share. You try to buy at $\$ 19.5$ a share and deliver your shares to the acquirer for $\$ 20$. It often works, but many things could go wrong and the engagement relation could turn sour...and you see the stock sink back to \$15.
- However, in mergers, the acquirer sometimes pays for the acquisition in terms of securities other than stock. The payment could be in bonds, preferred stock, warrants or rights. Institutions typically shun these illiquid and complex securities, and individuals who receive the unfamiliar securities often dispose them in the market automatically. The prices are thus driven down, making them attractive bargains.


## Bankruptcies

- What is the biggest fear on Wall Street? Bankruptcy! And that's where opportunities like American Express, and in recent years MacDonald's and perhaps Merck, are hiding.
- An unconventional and hiding opportunity that Greenblatt suggests is not the stock, but the bonds, bank debt and trade claims of companies that are broke and bankrupt.
- When a company is bankrupt, there are plenty of eager and anxious sellers and the businesses are always unpopular.
- The right time to buy is the tricky thing here. Some suggest buying during the process when the company may be emerging from bankruptcy proceedings.
- Another tricky issue is that you need to be very careful in choosing the 'right' bankrupt companies to invest in. You need to make sure that the "fried chicken" on Wall Street can one day fly again. And how do you do that? (Well, maybe you should consider research workshops like ours at zenway.com.)


## Corporate Restructuring

- When a troubled company goes through major corporate restructuring, bargain opportunities are often created.
- People shy away from major changes and uncertainties. Wall Street analysts tend to drop coverage of companies that are undergoing major corporate changes, creating further price dips for the stock.
- You can either invest after restructuring has already been announced or when a company is getting ready for restructuring. Your job is to pick and choose to find the major corporate changes for the better instead of worse.
- Just like Buffet avoiding 7-foot-bars where you must fly over and may break your neck when falling down on your back, Greenblatt too shuns complex restructurings where you can't understand what is really going on, or you have problems measuring the height of the bar.


## Recapitalization

- Greenblatt sees recapitalization transactions as an investment opportunity, where a stock buyback is sometimes financed by additional borrowings.
- The reason that makes debt-equity-recapitalization interesting is that buyback of equity increases the leverage in the balance sheet, thus increasing the tax saving which can then be passed on to the shareholders.
- Investors are often scared of new debt, thus pushing down the stock prices to attractive levels.
- Greenblatt believes that, in regard to recapitalization, "there is almost no other area of stock market where research and careful analysis can be rewarded as quickly and generously".


## Finally, The Disclaimer In Fineprint

Yes, you can become a stock market genius even if you are not too smart. But, as Joel Greenbaltt would warn you himself that there are tons of painstaking reading, learning and research involved in finding these hidden opportunities.

It's just like the conventional wisdom about free lunch, with which I had some rather personal experience. First, we've all heard that there is no free lunch. But then we would all find out that, if you search hard enough, and if you are "hungry" enough (just as I fled to America with practically nothing and was about to pass out in my advanced accounting classes), you would sometimes pick up a real free lunch here and there. And maybe, pack home some nice gift bags. For example, due to 15 years of hungry research and voracious accumulation of information and contacts, I have discovered quite a few free lunches where Warren Buffett and Joel Greenblatt would have no time to go to in places like Harvard Club... Have we met before?!

## An Evening with Mr. Greenblatt January-11-2006

## Joel Greenblatt by Shai Dardashti

Mr. Greenblatt, author of The Little Book that Beats the Market, treated members of the NYSSA to a special evening program on " Special Situations Investing".

Providing a wonderful glimpse into the evolution of his investment mindset, Mr. Greenblatt opened with an account of his college years - working with Rich Pzena to deconstruct the methods of Benjamin Graham. In the late 1970s, Mr. Greenblatt recalls, he "read a Forbes article about Graham" that discussed Net-Net Strategy, that is - stocks trading below liquidation value.

From my personal explorations into Grahamian techniques, I believe this is the actual article which inspired Mr. Greenblatt's value investing pursuits:

## The Return of Benjamin Graham, Forbes October 15, 1979

"Think of a time when stocks of 191 important American corporations are selling for less than net working capital per share. Are we talking about 1932? No, 1979."

Continuing his story of self discovery, Greenblatt recalls that at Graduate school at Wharton, he "wrote a paper published in the Journal of portfolio management."

In his typically humble and modest nature, Mr. Greenblatt chose to leave out the findings of his early explorations - published in a 1981 study. Below are some notes I compiled from research on the actual report:

| 1981 | Greenblatt, Pzena, <br> and Newberg | "How the Small Investor Can Beat the <br> Market | Journal of Portfolio <br> Management |
| :---: | :---: | :---: | :---: |

The Greenblatt/Pzena/Newberg study was intrigued by Graham's writings in Security Analysis in which "he outlines in little more than a page the opportunities to be found in stocks selling below their liquidation value. In studies between 1923 and 1957, Graham reported superior results when market levels enabled him to buy a diversified list of these bargain stocks."

The study examined the performance of stocks meeting Graham's rough liquidation value (net-net) estimate:

## Accounting Definition of Rough Liquidation Estimate:

"Current Assets" (cash, accounts receivable, inventory, etc.)
Less: "Current Liabilities" (short term debt, accounts payable, etc.)
Less: "Long Term Liabilities" (long term debt, capitalized leases, etc.)
Less: "Preferred Stock" (claim on corporate assets before common stock)
Divided by: Total Shares Outstanding

## EQUALS "Liquidating Value Per Share"

The study "did not consider the stocks that had shown a loss over the preceding 12 months."
Research covered " 15 segments of 4 months each over a six-year period in which the over-thecounter (NASDAQ) averages halved and then doubled... The period under study an from April 1972 to April 1978."

## The process looked exclusively at three factors:

- Price in relation to liquidation value
- Price/Earnings ratio
- Dividend Yield
- Stocks were sold after a 100\% gain or after 2 years, whichever came first (as per Graham's writings)

The Graham net-net buying process was applied within four distinct portfolio dynamics, each described below with its respective results:

- Portfolio 1:
o Price/liquidation value </= 1.0;
o Price/earnings: floating with bond yields;
- [require a P/E corresponding to twice the prevailing triple A yield in each period]
o Dividends: no dividend requirements
Results:
"During the 15 4-month periods our constraints dictated a position in the market, we averaged an annual compounded rate of return of $20.0 \%$ before dividends, commissions and taxes. The OTC index appreciated at an annual compounded rate of $1.5 \%$ during the same period."
"We would expect higher returns to accrue to riskier investments to compensate us for taking on the additional risk. Therefore, we also studied the volatility of the returns of our selected stocks with that of the NASDAQ market average. (During this period, the NASDAQ averages significantly outperformed the S\&P indexes of larger companies) A regression of our Portfolio 1 return and the OTC market return over the 15 periods resulted in the following:

Portfolio 1 return $=+6.14+.836$ (NASDAQ return), (4 month period)

Portfolio 1 standard deviation = 14.15;

OTC portfolio standard deviation = 12.75."

## Portfolio 2

o Price/liquidation value </= 0.85;
$0 \quad$ Price/earnings: floating with bond yields;
o Dividends: no dividend requirements

## Results:

"After we limited the purchases in Portfolio 1 to stocks selling below 85\% of liquidation value, the returns increased to a $27.1 \%$ annualized rate before dividends, commissions, and taxes (compared with the market's $1.3 \%$ annual performance). After taxes and commissions, this return approximated $16.5 \%$ annually.

The regression worked out to:

Portfolio 2 return $=+8.54+.752$ (NASDAQ return), (4 month period)

Portfolio 2 standard deviation = 14.58;

OTC portfolio standard deviation $=12.75$.

Adjusted beta = 1.14"

## Portfolio 3

$0 \quad$ Price/liquidation value </= 1.0;
$0 \quad$ Price/earnings: </=5.0
o Dividends: no dividend requirements

Results:
"When we used a low constant P/E ratio coupled with a discount to liquidation value, our returns were significantly improved to a $32.3 \%$ annualized rate before dividends, commissions, and taxes. After taxes and commissions, our return falls to $20.1 \%$ per year, compared to the OTC market's return of $2.0 \%$ during the 14 periods when we had a position in the market.

No stocks were purchased until August 1973 using the parameter of a PE below 5. The portfolio also entered the market closer to the tough and with more conservatively valued stocks. We outperformed the OTC index by $5 \%$ or more in 9 four-month periods, while we underperformed the market by $5 \%$ in only one period. The regression analysis was:

The regression analysis was:
Portfolio 3 return $=+9.9+.753($ NASDAQ return);
Portfolio 3 standard deviation $=14.35$;
OTC portfolio standard deviation = 13.16;
Adjusted beta $=1.09$.

## Portfolio 4

$0 \quad$ Price/liquidation value </= 0.85;
o Price/earnings: </= 5.0
o Dividends: no dividend restrictions
Results:
"Our most successful screen. It resulted in an annualized rate of over 42.2\% before dividends, commissions and taxes. The result before dividend returns approximated $29.2 \%$ for the 14 periods studied, compared to the $2.0 \%$ annual returns of the OTC markets. The regression analysis was:

Portfolio 4 return $=+12.83+.671($ NASDAQ return); ( 4 month period)
Portfolio 4 standard deviation $=14.94$
OTC portfolio standard deviation $=13.17$
Adjusted beta $=1.13$.

## Not bad, indeed.

## Greenblatt discusses the study

To produce the paper, Greenblatt explained to the NYSSA, he explored the S\&P stock guide - by hand - and, together with Rich Pzena, made a unique database of stock information. At the time of the study, the aspiring super investors had to calculate their findings on University of Pennsylvania's DEK 10 Digital Equipment Computer, a far stretch from the modern Compustat database and computing power of the internet age that Greenblatt explains was used to research his Magic Formula,

The downside to the " $42.2 \%$ annualized rate" of the Graham Formula, Greenblatt shared with his NYSSA audience, was that investors were getting a bargain, but the bargains disappeared in 1980s.

Greenblatt clearly is aware that, as Graham teaches, "cheap works" - and Mr. Greenblatt cited a variety of studies documenting the performance of low price-to-book, low-price-to-earnings, etc. (The sources of which, I presume, are the Tweedy Browne "What has Worked" report and the various experiments documents in Haugen's "The New Finance")

In an attempt to adapt the quantitative construct to reflect his appreciation for Warren Buffett's investment techniques, Greenblatt commenting on Buffett's presumed thought-Process: "Buying cheap works, I know that... But what if I buy good companies that are cheap? And see how it would do..."

## Working Towards The Magic Formula

So, Mr. Greenblatt began to study the question of "what is a good company?" The simple answer: A business with a high return on capital.

Business A)
$\$ 400,000$ cost of store to build.
\$200,000 earnings a year.
50\% ROIC
Business B)
\$400K to build.

10,000 earnings a year.
2.5\% ROC

Clearly, in this simplified example, Business A is the superior business.
As per his wonderfully concise summary:

1) Greenblatt ranked the businesses by ROIC.
2) And then ranked the shares by cheapness.
"More earns relative to price... I call that 'cheap."' - in reference to Earnings Yield.

## Developing the Magic Formula

Working with the two variables, high earnings yield and high return on invested capital, Mr. Greenblatt decided simply to combine the two rankings to create a list of businesses that have the best of both components.

Logically, a business that ranks \#100 for ROIC and ranks \#50 ranking for Earnings Yield would rank \#150 in The Magic Formula hierarchy.

To further research the effectiveness of this mechanical process, Mr. Greenblatt took his ranked list of Magic Formula results and divided the hierarchy into deciles, and simply performance of each decile. The results: The top ranked decile outperformed the 2 nd best, in turn was better than the 3 rd, etc. So, the performance of each decile was absolutely in line with the rankings from the Magic Formula.

Mr. Greenblatt, a veteran of Wall Street's inquisitive approach towards ground breaking claims, outlined complicated possible concerns with the process, and simple counter-arguments:
"But, the Magic Formula is subject to error due to... "
Look ahead bias

- The study used the Compustat point in time database. So the data used was reflective of information available precisely at the time period under examination.

Survivorship bias

- Again, the study used the point in time database

Small companies couldn't be purchased, transaction costs would kill you

- The same perfectly aligned decile rankings appeared when only exploring at top 1000 companies by market capitalization.

Fama frech argument: the formula is picking riskier stocks.

- Next question.

This is data mining

- This was the 1 st test attempted, and the weight of "good company" to "cheap stock" was a simple 50/50\%


## More Advanced Considerations: Piotroski and Haugen

Mr. Greenblatt compared his Magic Formula results to the stock selection techniques of Piotroski. Generally, Piotroski's work performs very well, but only its utility is effectively limited just to companies with a market capitalization up to $\$ 700$ million. So, for large cap stocks, Piotroski's work isn't all that effective.

Robert Haugen introduced a 71 factor model for superior stock selection. With monthly periodic turnover over the 10 year period, Haugen's technique demonstrated a $30 \%$ superior performance of his top ranked decile over the lowest ranked class of stocks.

Greenblatt found a $32 \%$ spread when researching the 2 factor Magic Formula. (ROIC and Earnings Yield)

To assess the long term viability of their respective approaches, and to reduce the transaction costs, Greenblatt compared his results with those of Haugen's.

## In Search of The Magic Formula

Mr. Greenblatt created an experiment in which he held selections derived from Haugen's 71 factor model for a year, with annual turn over, and developed sample portfolios every month for the 10 years. (So, he created portfolios tracking 120 rolling one year periods)

- Haugen's top decile beat the bottom decile by $5.63 \%$
- Greenblatt's 2 factor model recorded an $18.5 \%$ spread of out-performance.

Greenblatt repeated this experiment, looking at rolling 3 year periods (there were 169 such periods covered in the duration of his Magic Formula study)

- Haugen's Method: The worst 3-year period return was "-35\% or - 45\% "
- Greenblatt's Method: The worst 3-year period return was actually a positive return "around 10\%"

Eleventh Annual<br>Tomorrows Children's Fund Ira W. Sohn

Investment Research Conference Recap

## Sam Zell -- Equity Group Investments

## Real Estate Big Picture -

- Believes there is excess capital in the system
- Thinks it will take 5-7 years to burn off
- Cost of capital is much lower as assets have been monetized recently
- All driven by aging baby boomers need for income

Lee Ainslie -- Maverick Capital
Lexmark (LXK)

- 51.34 -- 4.6 bb enterprise value
- 950 mm in cash with 150 mm in debt

What's baked in:

- 05 was weak but 06 expected to be better
- Competition increased from many fronts including Epson
- Pricing environment is brutal
- Inventory correction shortened from $5 \frac{1}{2}$ weeks down to $41 / 2$ weeks
- Low end biz profits crushed

What's not baked in:

- 2006 changes could lead to 60 cents in eps
- Impact of $10 \%$ job cuts across the board
- FCF from 02-04 ranged from 579 mm to 685 mm and in 05 it bottomed at 300 mm
- Buy back of $20 \%$ could add 55 cents per share
- 061 st call at 3.30 but could actually do 4.00 to $4.25 \mathrm{~b} / \mathrm{c} 1 \mathrm{st}$ call underestimates these 2 items -- especially the buy back impact


## Choicepoint (CPS)

- \$44.07/share - 4.06bb enterprise value with $6 \%$ free cash flow yield
- Leader in employee data supplied to insurance industry and \#2 supplier of data to Homeland Security industry
- EPS growth from $\$ 1.33$ to $\$ 1.90$ as restructuring occurs
- After flurry of 50 deals in recent years that resulted in mid single ROIC - mgmt has decided to stop buying small companies.
- Sell off some of these businesses to focus on core business
- Institute major share buyback
- Reinvest proceeds in insurance biz where they hold \#1 spot and $90 \%$ market share
- $\quad 1^{\text {st }}$ call at $\$ 2.20$ but could do at least $\$ 2.35$ to $\$ 2.45$ with buyback

David Matlin - Matlin Patterson Global
Advisers

## Polymer Group (POLGA/POLGB) \$27

- -Makes non-woven textiles.
-     - Customers include - KMB, PG \& JNJ
- -Play on emerging markets
- -\$528mm market cap
- -6.7 ev/ebitda
-     - 115 ebitda
- $-\$ 400 \mathrm{~mm}$ in debt
- $-14 \%$ CAGR ebitda trading at $6.7 \times \mathrm{ev} / \mathrm{ebitda}$
- -ebitda - 04-106

05-115
06 -135 - projected
07 -150 - projected
Huntsman Chemical (HUN) \$18.31

- 221 mm shares out.
- 4.5 b in debt
- Trades at 7.6x 2006 EPS
- Commodity Chemical business trades at $8.1 x$
- Differentiated chemical business trades at $16.8 x$


## Split business:

- Sell commodity chemical business 4.5-5.5 ebitda of $322 \mathrm{~mm}=1.5-1.8 \mathrm{~b}$
- Specialty $7.8 x-9.5 x=10.7 b$
- Mid to high 20's values


## Steve Tananbaum - GoldenTree Asset Management

## Liberty (LBTYA )

- Global provider of triple play video
- 7x EV/EBITDA
- NAV: \$34 in 2007
- \$42 in 2008
- Ability to tender $1 / 3$ of shares outstanding
- Recent Buyback


## Williams Company (WMB)

- Natural Gas, Midstream and ENP Business
- NAV: \$29 in 2006
- $\quad \$ 32$ in 2007
- $\$ 34.75$ in 2008
- Great businesses with wrong capital structure that needs to be split up.
- $9.5 x$ Ebitda Pipeline Business
- $9.5 x$ Midstream Business
- $8.5 x$ ENP
- Spin off the ENP business from the Pipeline and Midstream Business, able to grow NAV 17\%


## James Dinan - York Capital Management

## Atlas Air

- $\$ 65-\$ 85$ value


## Philips (PHG)

- 25 Euro net cash; 0 debt; 4 of 5 businesses \#1 or \#2
- \$10B non core securities
- \$6B in Taiwan Semi
- $\$ 4 \mathrm{~B}$ in LG Philips
- If you value 7B for European Semis or $1.4 x$ revenues, then the rest of the company at:
- $4 x 2006$
- $3 x 2007$

The Limited (LTD)

- $\quad \$ 28$ with $4 \%$ Operating Margins can g o to $8 \%$, stock would be worth $\$ 35$
- Consensus: \$1.60 in 06 and \$1.80 in 07
- Believes: \$1.80 in 06 and $\$ 2.00$ in 07
- Retail - historically lost money
- Victoria Secret - 70\%
- Bath Body - 25\%

Alcan (AL)

- \$17B market cap; \$24B EV
- $5.5 x$ EV/EBITDA; 9x EPS
- Half are downstream assets
- If company is valued at $7.8-8 x$ packaging and $7.5 x$ engineered products, then that creates a $4 x$ EV/EBITDA core business
- $\quad \$ 9-\$ 10 B$ in value to separate


## Advanced Medical Optics (EYE)

- \$3B market cap
- Solutions and lens business but the multifocal IOL business is growing from \$200mm to \$1B 2010
- 30-40\% margins
- $\quad \$ 3$ Cash EPS
- Deserves 20x PE, not 15x
- $20 \%$ CAGR


## Kansas City Southern (KSU)

- Railroad US to Mexico a large container facility being built in Mexico
- $7.5 x-8.0 x$ EBITDA
- Huge operating leverage
- 10-14x on take out value
- \$36-\$57 value


## William Browder - Hermitage Capital Management Ltd

## Surgutnefte

- $4^{\text {th }}$ Largest Oil Company
- Unfriendly management
- Forensic accounting - illegal share buyback 60\% of company never disclosed
- Suing the company
- \$60B market cap
- $\$ 28.2 b$ stock repurchases
- \$13B cash
- \$14.4B Net
- $\quad \$ 1.60$ per barrel of reserves


## Gazprom

- Valued at $\$ 2.30$ per barrel
- High gas contracts in the Ukraine
- Higher gas contracts domestically
- Build a German pipeline


## Meridee Moore - Watershed Asset

Management
Advocates being long the air cargo sector $\mathrm{b} / \mathrm{c}$ :

- 6-7\% top line CAGR
- Huge overcapacity issues being corrected
- Limited new capacity coming on stream
- Higher fuel costs cut down on possible conversions


## Atlas Air World Wide (AAWW)

- \$49.00/share -- 975mm market cap
- Freight forward pure play
- Provides services to industry -- e.g. pilots and ground services etc
- Story catalysts include:
- 100 mm in cost cuts
- Better utilization mix of military and commercial
- High teens free cash flow yield to equity holders
- New CEO on board


## William Ackman - Pershing Square

## Capital

Canadian Tire (CTC/A) \$65

- $6.8 \times$ ev/ebitda 13.5X p/e
- Canadian tire co with 4 businesses
- 1) Tire business
- 2) Financial Services
- 3) Marks Work Warehouse (revs going from $\$ 54$ mill to $\$ 84$ mill 05 to 06)
- 4) Canadian Petroleum (gas stations $\$ 1.3$ bill in sales and $\$ 22$ mill Ebitda, could sell real estate)
- 10 \% FCF yield
- Own 75\% of real estate
- It's a franchise business like Tim Horton's with $1 / 2$ the multiple; they are expanding the store base, which is hurting comps.
- If they sell the receivables of the credit card portfolio the stock is worth \$84
- If the do a Sale Leaseback on real estate the stock is worth $\$ 96$
- If they sell the extra real estate the stock is worth $\$ 100$
- If they do an income trust conversion the stock is worth \$129
- THE NEW MANAGEMENT TEAM IS RECEPTIVE TO SHAREHOLDER VALUE


## Joel Greenblatt - Gotham Partners

## American Express (AXP) \$52

- High quality franchise it is worth $\$ 75$ to $\$ 80$ target
- High ROIC and only needs to reinvest 25\% of its earnings
- Very predictable business
- DCF supports \$80 stock
- He believes it should trade at 20-22X eps of $\$ 3.70$ in 2008


## David Einhorn - Greenlight Capital

Freescale Semiconductor (FSL) \$29.96

- The streets estimates of $\$ 1.95$ are too low by 25 cents.
- The street is too worried about share loss at MOT while there are huge opportunities for design wins in Korea and Finland

Allied Capital (ALD) \$29.82

- Management has a stock option plan where the co buys back in the money options while the company is in a quiet period.
- With investigations ongoing this allows co insiders to do massive sell programs with out affecting the open market trading. Also, regulators wont be able to accuse them of insider trading.

Microsoft (MSFT) \$22.79

- 9X Ebit 13.5 X p/e 2007
- MSFT has 7 businesses and 4 of them are unprofitable which all together loose a couple billion per year. 1) Mobile 2) MSN 3) Home entertainment
- Mobile- if they got $1 / 2$ the market share they get from the PC business it would be a couple billion in revs
- MSN- could get a multiple of competing businesses which are 14-17 Price to Sales
- If they can get rid of $1 / 3$ of the piracy it could equal $\$ 2$ billion in operating profit
- MSFT produces $\$ 1$ billion in FCF/ Month
- Great core business and he never thought he could get such a great company at such a cheap price
- $\quad \$ 35$ billion in Cash. They could lever up the balance sheet with $\$ 40$ billion in debt and buy back 1/3 of stock


## Barry Rosenstein - JANA Partners

Compass group (CPG.LN) \$231.25
Catering/food Service Company

- \$6b EV
- \$12b Sales
- \$850m ebitda
- $4.5 \%$ Yield
- $7.3 x$ vs. $8.8 x$ peers
- $14 x$ EPS
- 18-20 P/E
- Good Secular Story
- Outsourcing continues - 95\% rev recurring business as contracts get renewed
- There is industry consolidation - 2 competitors are being sold
- The co made a series of bad contracts and acquisitions so the margins are now way below the industry
Restructuring:
- Stabilize margins, sell assets, exit below margin contracts, reduce SG\&A

Opportunity:

- If there is $\$ 250 \mathrm{~mm}$ in cost cuts then $5.3 \mathrm{x} \mathrm{ev} / \mathrm{ebitda}$
- $10.5 \%$ FCF
- If it trades at $7.5=390 p$

Six Flags (PKS) \$8.65

- \$1.3b market cap.
- \$2.2b debt
- \$3.5b EV
- $6.3 x$ levered
- 1.6b Net operating losses

Over $4 y r s$ ebitda went from $\$ 410 \mathrm{~m}$ to $\$ 300 \mathrm{~m}$ with bad acquisitions and poor capex spending. Lower margins than comps even though $2 x$ the size. New chairman Dan Snyder and CEO Mark Shapiro

- New branded/license/sponsorship
\$20mm per year
- Increase parking
- Gate receipt increases
- Eliminate discount to Sr citizen discount \$10-20mm per year
\$15-20mm per year
\$5-8mm per year
- $\$ 150 \mathrm{~mm}$ in rev=\$100 in incremental ebitda

Cut capex \$30-50\$mm. Re-brand, lower cost attractions sell assets including excess land, \$400mm in 18 months (recently sold Houston property for $\$ 77 \mathrm{~mm}$ ). 2007 FCF of $\$ 125 \mathrm{~mm}$. $9.3 x$ equity value forward \#'s = \$12 equity value. No taxes paid for years due to net operating losses.

Footlocker (FL)

## Joel Greenblatt, Gotham Capital

He spent entire time plugging Foot Locker (\$11.50).
25\% pre-tax ROIC, rising to $35 \%$ in the next two years.
Market share is twice that of the next two competitors combined
If things don't go right, you should make $75 \%$ on the stock in 2 years.
They're in a big fight with their largest vendor, Nike. Nike wants them to carry their high-end line and not to discount. A front-page story in recent WSJ said FL is losing this battle badly.

Must focus on facts:

- Even analysts who hate the company think it will earn $\$ 1.20$ this year. Depr and cap ex are the same -- cancel each other out.

They are doing high-return remodels for the next two years that should add \$0.12/year

Made disastrous foray into big box retailing; shut this down; getting out of leases over the next five years, improving earnings by $\$ 0.30$; assume \$0.06/year

Have $\$ 350 \mathrm{M}$ in cash and debt, but paying more on debt than earning on cash, so could use cash to pay off debt, take a one-time charge, and then save $\$ 0.08$.

Add it all up and you get $\$ 1.64$ in EPS in 2 years. Assume 12 multiple is $\$ 19.68$, if nothing good happens.

Possible upside events:

- Nike can't replace them; sees settlement in next 6-12 months -- a big plus-Hired guy who turned around Champs to head US operations; has good relationship with Nike
- Stores are doing great in Europe; no competition; high single digit comps; no Nike problem there
- \$0.18 from last three years of getting out of big box leases
- economy could improve

END

Greenblatt Class \#4 Sept. 23, 2003
What are the problems with Rich Pzena's approach?

He forecasts by extrapolating what are the projected normalized earnings over the next 3 to 5 years. He will take the bottom quintile of companies' lowest multiples.

What he said-on average if he is looking at normalized earnings of 13 times for the market as a whole, his universe is 6-7 times earnings. He looks forward by looking backwards at historical normalized earnings.

## Mkt. Timing

Jeff Vinik went into a high percentage of cash of his portfolio and then was fired from Magellan. Investors did not want him to market time, but to pick stocks.

Greenblatt complaint: So much work and subjectivity that goes into estimating normalized earnings. Why not use a standard metric?

Price to book: How much you earn over time discounted back. How much you earn on book value? Coke has a great brand with much cash generating activity. Earnings power may indicate higher price to book. No accounting for high returns to capital. Look at normal returns and price to book.

Airline passenger miles have grown 5\% for the past 50 years. Normalized earnings is what the company would earn in an average year.

Extrapolate naively and search in the bottom quintile.

Problem with approach (Prof. Greenblatt) is that Rich Pzena is smarter than us. Some of the things are simple to him--big picture--Airbus is not going to grow. How he looks at the world. It is difficult to replicate that broad industry analysis and expertise.

Joel doesn't need to be that smart. Be more selective and seek more disparity in price value relationships.

Disagree with:
Main assumption: EBIT (w/o debt) x 6. = Net Income, I assume depreciation is roughly similar to capex. Depreciation and maintenance capex are similar. Look out for when you have a cash-eating business and depreciation eats up more than capex. Deduct when capex exceeds depreciation.

## No catalyst

Special situation: always has a catalyst. Sometimes they are so cheap that eventually the market will get it right. Because I am not as diversified, I can pick and choose. Rich Pzena would rather have 30 or 40 stocks rather than concentrating. Hopefully, I can give you tools to discern better choices from Rich's portfolio.

Boeing is going to earn $\$ 5.50$ per share normalized in five years so it is trading 5-7 times now.
The 8 times company might be better than 6 times company because it earns higher returns on capital. I would rather own the higher return business all things being equal. How much assets are being used to generate your returns.

```
$5.00 Normal Earnings
$50 Capital Basis vs. $70
Thus 10% ROIC 7%
```

Problems with EBITDA. DA --- ignores capex.
EBITDA analysis is often used to justify high price because money is cheap. Review the negatives of EBITDA.

How to determine a purchase or value an investment

## EBIT/Assets

EBIT/Tangible Assets - (WC plus FA --don't care about historical assets).
How much money earned on the pre-tax money on the net tangible assets (exclude Goodwill)
The money you have to lay-out: net avg. working capital + fixed assets (assume no debt) then exclude net cash (since it is not needed in business). The tangible assets because these are the assets I have to replace--exclude Goodwill (price over the net value of the business).

Be conservative on everything, especially return. On the margin, how much capital is needed to put in to earn a return?

Borrow money at $10 \%$ and earn $25 \%$ pre-tax yield--I would want to own that spread: $\$ 1.00$ yields 25 cents. On the margin when I open a new business: I put out working capital, FA.

Read Buffettology--How to look at Return on Capital. By using current return on investment capital. Beware that this doesn't necessarily mean incremental investment will earn the same rate of return. Think through assumptions.

High returns on equity imply a strong franchise. Warren found a few businesses that didn't need to spend their retained earnings upgrading plant and equipment or on new-product development, but could spend their earnings either on acquiring new businesses or expanding the operations of their already profitable core enterprises. Is growth financed internally or from additional infusions of capital?

EV/(EBIT - maintenance Cap-ex is the pre-tax owner's return you get in the business.)
Study EBITDA and its weaknesses.
If Coke is expanding its business, then will Coke get the same rate of returns. Coke expands. If I went into the business, the returns would be much lower. Will increased investment get you the same returns? Be conservative in your assumptions.

Use pre-tax borrowing costs and pre-tax returns--be consistent.
Use a margin of safety in case you are wrong. Make assumptions and only bet on the ones where there is a huge disparity between price and value. If you had all the answers, there wouldn't be a game. Behavioral Biases: people get too emotional and dislike uncertainty.

If Aetna doesn't do well and earns \$3.50 instead of \$5.00 in two years, then the stock doesn't go down much.
Be defensive in buying 50 cents and 60 cents dollars.

Rich, a man with a hammer, he looks in the box for a turnaround.
Bill Miller who bought Amazon is willing to make more uncertain assumptions. A lot of people think they are buying something cheap due to the future growth.

Understand ROIC.
Quick and dirty: Take a look at net tangible assets. Assets - Goodwill = tangible assets
ROC. Return on \$ invested in business.

EBIT/EV: Return on money put into the business. EV $=($ Debt + Mkt. Cap. $)-$ excess cash
(\$500 mkt. Cap + \$200 debt) - cash =
Use face value of debt. In distress situations you might want to use market value of the debt.

EBIT/EV = 100 million $/ \$ 500$ million $=20 \%$ pre-tax return or pre-tax yield. Cheap? Is the $\$ 100$ million stable and growing. Then it is cheap.
$\$ 500$ million = $\$ 300$ million for equity ad $\$ 200$ million for debt.
Look at real EBIT, which means depreciation - capex (add or subtract from depreciation).
$20 \%$ pre-tax or $12 \%$ after-tax of 8 times earnings. Now 10 year bond is yielding $4 \%$, but use $6 \%$.
Pay 20 times or a yield of $5 \%(1 / 20)$, I better be confident of growth. High quality franchise, in what content.
Above is a simple and important point.
I won a proxy fight and the company had 9,000 employees that were depending upon me. I had to look at acquisition opportunities to make the company viable and profitable.

Investment bankers: borrow at $8 \%$ after tax that is $5 \%$ and you pay 18 times earnings for this business and it will be non-dilutive and it will add to your EPS.

Pay 9 x EBIT for this business. Investing in an asset that yields $9 \%$ and borrowing at $8 \%$, so spread is $1 \%$. Earning $\$ 1$ while paying $\$ 9.00$ or $11 \%$ and borrowing money at $10 \%$ so $1 \%$ spread or 27 cents per share in extra earnings. Borrowing at $10 \%$ in money that is not locked in while earning $11 \%$ that could go to $14 \%$ or 8\%. No margin for error-no Margin of Safety.

They (Inv. Bankers) gave me a 100 page book, but when you boil it all down that is what I saw. K.I.S.S
We eventually bought something that yielded us $\$ 80$ million for $\$ 400$ million. EBIT looked like $\$ 55$ million, but the company had built a whole new plant and it was operating at $20 \%$ of capacity. A 50 year life of plant, so no new investment. So If I added back depreciation I picked up another $\$ 25$ million so $\$ 55+\$ 25=80$ million. 20\% pretax return.
$\$ 80 / \$ 400$ purchase price or $20 \%$ yield. Start to look at the world in a simple, direct way.
Have them summarize their bottom line:

- Is the business growing?
- What is your return on capital?

Our holding period is 6 months to 2 years--we will look at many stocks - 30 stocks but only buy 1 of them.
EBIT multiple instead of an EBITDA multiple. EBIT to be Operating earnings before taxes is a good number. Conceptually, get back to the real EBIT. Decide the maintenance CAP-EX.

Value Investors:
Bill Miller will buy Amazon because he is willing to make projections under greater uncertainty.

## Understand ROIC.

EBIT/EV is the return on \$ invested in the business.
EV $=$ Net Debt + Market Capital Minus Excess Cash. $\quad$ EV $=(\$ 500+\$ 200)-\$ 100=\$ 600$
EBIT/EV= $\$ 100 / \$ 500$ or ( $\$ 200$ mil. for debt $+\$ 300$ mil for equity capitalization $)=20 \%($ is it stable or growing?).
$20 \%$ pretax then multiple of $0.6(1-40 \%$ tax rate $)=12 \%$ after-tax--P/E is $8 x$. Now 10 year bond is $4 \%$, but use $6 \%$ for a more realistic hurdle rate.
$20 \mathrm{P} / \mathrm{E}=5 \%$ yield. Rarely would Joel buy such a multiple but if the growth was strong and he was very confident of growth. The company has a high quality franchise in what context.

Magna Auto - a Spin-off

## To buy a business--look at the enterprise value first.

Some companies can carry huge leverage such as equity of $\$ 1.00$ and debt of $\$ 9.00$ or EV of $\$ 10$ Then EV = 12 as equity goes to $\$ 3.00$. Equity tripled.

Boeing's unfunded Pension Fund: \$30 billion. With $\$ 15$ billion unfunded so at a $50 \%$ tax rate $\$ 0.70$ a year off his projections.

Joel sees things from 40,000 feet. He is a generalist
Duff \& Phelps: An example of a strong franchise.
Growth but tangible assets not growing! Earnings are used to buy back stock if the stock is cheap enough. Spin-off in 1994 at $\$ 13.00$ per share. Self-generated growth with high ROIC.

In 2 years: $\$ 2$ million in expense gone. So Net income plus $\$ 2$ million to get normalized earnings.
Market Share: S\&P with 40\%, Moody with $40 \%$, D\&F with $10 \%$ and others with $10 \%$.
BAD: 2 big competitors
GOOD: High ROIC.
\$3.16 in earnings and \$50 stock = 16 times.
EBIT

+ Depr.
-Capex
$+\$ 2$ million with no more expense. (look at notes to financial statements)
\$31.6 million x 0.6 = \$18.2 in Normalized Net Income/5.1 FD Shares w/o buy-backs.
$\$ 3.60$ per share or 13.2 xs
20\% - 24\% EBIT growth.
Margins
Buy Backs of 370,000 shares net per year?
\$28.4 EBIT in 1998. Bad, good, great. EBIT is 24\%
30\% Net Income --Shares being bought back
$8 \%--5$ years growth so $\$ 41.7$ million plus $\$ 2$ million no longer paid out $=\$ 43.7$ pretax x $0.6=$
$\$ 26.3 \times 13$ multiple = $\$ 341$ million then divide by 3.5 million shares $=\$ 99$ stock in 5 years. VERY
conservative assumptions. $\$ 1$ earned for $\$ 13$ paid $=7.8 \%$ yield that is likely to grow rapidly vs. $7 \%$ yield on 10 year bonds.

With 13\% growth then $\$ 122$ per share in 5 years at same multiple
With 20\% growth then $\$ 164$ per share in 5 years at same multiple
Pick low multiple to give yourself adequate margins of safety.

- Greenblatt owns 6 to 8 positions held 6 months to 2 years.
- Most of my work time screening ideas-reading the paper. The value investor club. We wanted to find good ideas. If we got one or two ideas a year, it would be a big home run for us.

Screening ideas
Stock screens
A year later, Duff and Phelps was bought out by Fitch.
Notes:

Efficientfrontier.com A good scientist takes nothing for granted. Write about finance - people ask you to manage their money.

Requirements: Math, History of markets, Toughness to do the right thing, and Independence of Thought.
H\&R Block.
AIG
SO
Freddie - Mac
YUM

Millea Holding, AVX
Petsmart, Covance
Prioty HC
PXRE Co.
Petrocorp
Rich Electric
Royce RYOTX
END
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Greenblatt Class \#5

October 01, 2003
Next week Special Situations. Class off Oct. $15^{\text {th }}$. Presentations on Oct. $22^{\text {nd }}$.
Commodore International (CBU)

| Company X In Millions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9/30/84 | Incr./Decr. | 9/30/83 | Incr./Decr. | 9/30/82 |
| Net Sales | 244.2 | 16.67\% | 209.3 | 102.61\% | 103.3 |
| Accounts/Rec. | 254.7 | 34.12\% | 189.9 | 5.50\% | 180 |
| Inventories | 437.4 | 9.71\% | 398.7 | 22.00\% | 326.8 |
|  |  |  |  | Big Sales |  |
| Inventories |  |  |  |  |  |
| Raw Materials \& WIP | 243.2 | -10.03\% | 270.3 |  |  |
| Finished Goods | 194.2 | 51.25\% | 128.4 |  |  |
|  | Sales up but finished Goods up bigger not selling as well |  |  |  |  |
| Company X In Millions | Commodore Computer |  |  |  |  |
|  |  |  |  |  |  |
|  | 12/31/84 | Incr./Decr. | 12/31/83 | Incr./Decr. | 12/31/82 |
| Net Sales (6 mos.) | 582.9 | -9.02\% | 640.7 | 129.15\% | 279.6 |
| Accounts/Rec. |  | divergence |  |  |  |
| Inventories | 449.3 | 56.17\% | 287.7 | 130.34\% | 124.9 |
| Inventories | Goods Bad | After \$30M | Write-down |  |  |
| Raw Materials \& WIP | 204.7 | 33.62\% | 153.2 | 123.65\% | 68.5 |
| Finished Goods | 244.6 | 81.86\% | 134.5 | 138.48\% | 56.4 |

A very powerful tool to use to detect problems: Study relationships between Sales and A/R \& Inventory. Compare growth in Sales, Inventory and A/R with each other. Delve deeper when you note a divergence.

Inventory is up but not finished goods-so company is stocking up on goods. Big disparities are bad.
Note that in example above: Sales down 9\% but finished goods up $82 \%$. Goods not selling. By keeping costs in inventory and not writing down immediately--earnings are artificially high.

## Thorton O’Glove: Chapter 8, Two Key Ratios: A/R and Inventories, in Quality of Earnings.

The best method I have ever discovered to predict future downwards earnings revisions by Wall Street security analysts—is a careful analysis of $\mathrm{A} / \mathrm{R}$ and inventories.

The analysis of Sales and A/R may provide a clue as to whether a company is merely shifting inventory from the corporate level to its customers because of a "hard sell" sales campaign or costly incentives. In such instances, this type of sales may constitute "borrowing from the future." Within this context, it is important to note that in most instances, a sale is recorded by a company when the goods are shipped to the customer.

Also, there is the added cost to the company in carrying an above-average amount of $A / R$.
Example in table above, Commodore International (CBU). Note that in 09/82 sales advanced by $102 \%$, while A/R rose by only $5.5 \%$, an indication in a surge in demand. But then in 09/83 and 09/84, CBU's A/R rose 2 x as fast as sales. This is a clear sign that CBU's retailers were moving out its products at a slower than usually pace, while the company was shoveling out its old products in what looked like an attempt to dump them on the market in advance of new introductions. In this regard, inventories rose at a slower rate, they were worthy of a more detailed analysis.

What is known as a "negative inventory divergence," meaning that while the raw materials and work-inprogress components of inventories declined, finished goods increased substantially. At $C B U$, raw materials, in this case electronic components, were being assembled into microcomputers and related gear, which despite an intense sales campaign were piling up as inventories of finished goods. Given the relationship between these two sets of figures, it isn't difficult to see that the dollar figures for the finished goods component of inventories on Sept 30, 1984 were too high.

The six months ended Dec. 31 figures had been released by then, showing earnings of $\$ 1.00$ per share against $\$ 2.41$ for the same period the previous fiscal year.

What we see in the table above is a huge buildup in inventories, probably older micros the market simply couldn't or wouldn't absorb. For the six months ended Dec. 31, 1984, the company's sales declined by 9 percent, while inventories rose by 56.2 percent. Note that the finished goods inventory increased by 82 percent, while raw materials and work-in-process rose by only $34 \%$, indicating that CBU was still experiencing a backup of finished goods inventory. Expect recurring and large inventory write-downs.

Higher trending inventories in relation to sales can lead to inventory markdowns, write-offs, etc. In addition, it is important to note that an excess of inventories, time and time again, is a good indicator of future
slowdown in production. Within this context, it is important to analyze the components of inventories. If the finished goods segment of inventories is rising much more rapidly than raw materials and/or work-in-process, it is likely that the company has an abundance of finished goods and will have to slow down production. Akin to $A / R$, bulging inventories are costly to carry.

Compare with the same reporting period in previous years. Be especially watchful in those industries subject to rapid changes in products and taste.-high fashions, seasonal goods, or high tech.

Fast growing industries are places to watch-out for. "Nothing recedes like success."
$A / R$ and inventory analysis in relation to changes in sales is a great barometer for forecasting negative earnings surprises.
"Positive inventory component divergence," meaning simply the reverse of some of the illustrations described so far, which were negative inventory divergences. The positive version transpires when the raw materials component of inventories is advancing much more rapidly than the work-in-process and finished goods inventory (which declines) while ordering raw materials in larger amounts (so this component of inventories is enlarged). This, of course, is good news, and would trigger bullish impulses.

The Best Short Ideas: 1. When the company is a Fraud
2. When the company will run out of money

Both have catalysts.
Greenblatt was short Bally Entertainment at $\$ 10$ and it was at $\$ 2.00$, Bonds were $\$ 15$ cents on the dollar. Clearly worthless in a static situation, but smart money bought up the bonds cheaply and changed the capitalization of the company. He covered at $\$ 5.00$. Things change.

Sunbeam Corporation

|  | Dec. 28, 1997 | Dec. 29 1996 |
| :--- | :---: | :---: |
| Sales | $1,168,182$ up 18\% | $984,236(3.2 \%)$ |
| CGS | 837,683 Down $5 \%$ | 900,573 |
| Restructuring Costs | --- | 154,869 |
| A/R | 295,550 up $40 \%$ | $213,438 \quad(1.3 \%)$ |
| Inventories | 256,180 up 58\% | 162,252 |
| Net Earnings | 109,415 | $-228,262$ Big Restructuring Chg. |
| CFO | $\mathbf{- 8 , 2 4 9}$ Big Discrepancy w/ NI | 14,163 |

Often revenue that is recognized in a premature or fictitious manner is not collected. Accordingly, a balance sheet account, other than cash, will increase as this revenue is recognized. Typically that balance sheet account is accounts receivable. Unusual increases in accounts receivable commonly accompany questionable revenue, whether due to uncertainties about the earnings process or about collectibility. Sunbeam used aggressive accounting tactics, to boost revenue in 1997. In a bill-and-hold arrangement, while recognized, revenue collection is delayed. Accordingly, one should see an accompanying increase in A/R.

Note the significant buildup in $A / R$ as the company became more aggressive in its revenue recognition policies. An increase in $A / R$ that is faster than revenue than an increase in revenue is not a problem if it is for only a limited time and does not result in a collection period for $\mathrm{A} / \mathrm{R}$ that is significantly at odds with the credit terms being offered.

## Barrons Article in 1997:

Sunbeam wrote down inventory to $\$ 0$ from $\$ 90$ million for product lines being discontinued and other perfectly good items so its future profits would grow. Even if Sunbeam realized just 50 cents on the dollar by selling these goods in 1997, that would account for about a third of last year's net income of $\$ 109.4$ million. They over-reserved to add to income. $\$ 25$ million added from drawing down reserves.

Pre-paying expenses not a problem (Barron's incorrect). However, note impact of shifting expenses from the future to the present.

They capitalized current expenses to make an asset account on the balance sheet.
Sunbeam stuffed inventory. "Bill and Hold" sales and never even shipped.
Sunbeam reported " $\$ 109$ million in earnings" but had a $-\$ 8.2$ million cash drain.
Sunbeam also extended its qtr. From March 28 to March 31 to add 3 more days of sales to its qtr. End.
When the Barron's story came out, Sunbeam was trading at $\$ 22.00$ or $16 x$ "fake" earnings.

The Financial Numbers Game, Charles W. Mulford.
Sunbeam intentionally overestimated the costs of its restructuring, leading to understated results for 1996 and higher results for future years.

By recording unusually high restructuring costs, the company was able to effectively move future-year expenses into its 1996 results. For example, among the costs included in the restructuring charge were reserves or liabilities for future environmental and litigation costs. To the extent that these costs were normal operating expenses of future years, they should not have been included in a charge taken in 1996.
Thus, by recording an overly large restructuring charge in 1996, the company was able to boost results for 1997 and beyond.

Sunbeam boosted 1997 revenue through "bill and hold" practices, where it sold products to customers with an agreement that it would deliver them later. The company recorded as revenue what were effectively consignment sales given the liberal return policies that were instituted. Sales were contingent not final. Bill-and-Hold Transactions. In some sales, a valid order is received and the goods are complete and ready for shipment. However, for various reasons-for example, a lack of available space or sufficient inventory in distribution channels-the customer may not be ready to take delivery. A bill-and-hold transaction is effected when an invoice is issued, but the goods in question are simply segregated outside of other inventory of the selling company or shipped to a warehouse for storage, awaiting customer instructions.

Sunbeam employed extensive use of bill-and-hold practices as a sales promotion campaign. During 1997 the company sold barbeque grills to retailers at bargain prices before the normal buying season for such products. Sunbeam was using the deals to recognize revenue prematurely, borrowing sales from the first and second quarters of 1998.

Criteria for Recognizing Revenue in Advance of Shipment

1. The risks of ownership have passed to the buyer.
2. The customer must have made a fixed commitment to purchase the goods, preferably in written documentation.
3. The buyer, not the seller, must request that the transaction be on a bill-and-hold basis. The buyers must have a substantial business purpose for ordering the goods on a bill and hold basis.
4. There must be a fixed schedule for delivery of the goods. The date for delivery must be reasonable and must be consistent with the buyer's business purpose.
5. The seller must not have retained any specific performance obligations such that the earnings process is not complete.
6. The ordered goods must have been segregated from the seller's inventory and not be subject to being used to fill other orders.
7. The goods must be complete and ready for shipment.

In 1996, including the effects of the restructuring charge, Sunbeam reported a pretax operating loss of \$285.2 million. In 1997, before restatement, the company reported pre-tax operating income of $\$ 1999.4$ million.

Once results for the year were restated to remove the effects of the overly large restructuring charge and to adjust for aggressive revenue recognition practices, Sunbeam's pretax operating profit for 1997 was reduced too $\$ 104.1$ million.

WorldCom just capitalized all expenses.
When Recs. and Inventories growing faster than sales--a red flag. Look further to see what inventories are made of.

Buffett is now (Oct. 2003) borrowing in the bond market to buy Clayton homes.
Duff \& Phelps has 100 ROIC.

SEE's Candy: Value a business within your circle of competence.
Get an idea of broad valuation thoughts, how to think about the market, and then how to find opportunities.
Next week, special situations.
Duff \& Phelps had 100\% ROIC—a great business. A good business throws off cash, while a bad business consumes cash-Textile business.

Buffett could lock in the spread between LT and ST Interest rates.
Buffett uses EBITDA - Maintenance and Growth Cap-ex. 6\% yield gives you a $\$ 1.00$ for each $\$ 16.60$ paid. How secure is the growth, how secure is the dollar?

Buffett likes high ROE return companies with predictable growth.
Coke had grown consumption for 110 years. Per capita consumption going up. He has confidence about what Coke and Gillette will do in 10 years. Keep it simple. Business, People, Price
Franchise value-Hershey Bar: would people pay 5 cents more for it.
See's candy is perceived as the best candy. A castle with a growing moat.
Wrigley's: tastes, service and availability.
If you only had 20 punches, you would think carefully about what you are doing.
Study Progressive Insurance

## Any good investment idea can be phrased in a paragraph.

## GOAL of this course:

1. Know how to value a business within your circle of competence. Understand particular industries. You don't have to know a lot of things, know a few things.

## 2. How to view the market, Mr. Market.

I understand retailers. Can they generate enough cash to grow internally? Discount the cash back.
Internet companies trading at $\$ 2.00$ with $\$ 3.00$ in cash per share and below cash, earning money.
Page 37: EBITDA is a poor yardstick, it way overstates cash flow. Use EBIT minus maint. Capex..
__ Mental Health really earning \$2.3 in free cash due to amortization. Amortization a real non-cash expense but economic goodwill not declining.

## The hard part is to sit on my hands waiting for an opportunity-3 to $\mathbf{6}$ months and the market usually gives you opportunities. Patience

Bad business: must spend Capex to keep up with the Jones. No competitive advantage. Must spend money to stay in place. Time is the friend of a good business, the enemy of the bad.

Beta does not equal risk. Business and knowledge reduce risk.
$80 \%$ to $20 \%----10$ better investments.
Greenblatt: Don't assume much. Common sense about what I understand.
Margin of safety: $\$ 8$ to $\$ 12$ range of value, $\$ 10$ with conservative assumptions-buy at $\$ 5.00$ to $\$ 6.00$.

Greenblatt: I have looked at a lot of stuff. 25 years—seen industries before underlying work. Check the: comparables. Assumptions remain correct adjust valuation. Less margin for error, more work.

I know my circle of competence: what I can assume and can't assume.

When to sell: Thesis is correct. Selling-taxes are LT, world of alternatives. Now 85\% but other opportunities are $50 \%$ at a discount.

People are very emotional so the market will swing to extremes.
During the Internet bubble, there were many bargains in prosaic businesses. What would happen when the bubble bursts? I am better at valuing companies than market timing or knowing the level of the market.

I don't know a lot-a valid assumption. I do have common sense about what I can and can't predict. I don't know how much the company is going to grow its sales, earnings over the next five years. If I think it is worth $\$ 10$ in broad brush strokes, and I can buy it at $\$ 5$ or $\$ 6$ per share. I won't get jerked out of it at $\$ 4.00$. Right more than you are wrong. Back of the envelop calculations.

Greenblatt: If there are questions I can't answer, I skip it. If I buy 1 that works, it doesn't really matter if I let the other 9 go. I look at a lot of stuff, but I only care about what I buy working out. I research the company carefully. I have pretty good instincts and a short hand for what I am looking for. I know the metrics underlying the business. Sometimes we do our work fast and then continue.

As long as you buy right, the selling is easier. I am constantly looking for opportunities.
Have we analyzed the industry correctly? Keep re-evaluating. The rest of time is spent justifying.
Next week, we will look at special situations. Read my Book, You Can Be a Stock Market Genius. When the spread is so huge, I feel comfortable looking at it.
**KNOW: return on capital, ROE, ROA.
ROC $=$ ROE $/ 1+$ DTE or LT debt to capital. ROC $=$ ROE $\times(1-\mathrm{DTC})$.
Owner earnings: NT + Depreciation - Maint. Capex.

## www.sherlockinvesting.com/articles/capitalism.htm

Graham would buy Net/Nets: CA - all liabilities. Stock at $\$ 4.00$ but Liquidation Value is $\$ 6.00$-price is below liquidation value. A 20\% annualized return with quick turnover by buying "cigar butts."

Buffett would say: better to buy a fair price for a great business than a great price for a poor business. Buy business at $\$ 5$ in a business worth $\$ 10$, but $\$ 10$ is eroding to $\$ 7.00$.

Buy a stock worth $\$ 7.00$ at $\$ 5.00$, but value is growing to $\$ 10.00$ then $\$ 12.00$.

## END

## Greenblatt Class \#6

Oct. 08, 2003
Next week Special Situations. Class off Oct. $15^{\text {th }}$. Presentations on Oct. $22^{\text {nd }}$.

The purpose of the assignment is to test your valuation skills. Look at special situations. Type single space with back-up and comparative analysis. $\$ 20$ million market cap and US based. Greenblatt wants to see your reasoning needed to reach your conclusion-your thought process.

No P/E or Price/Sales recommendations.

- Use EV/EBIT Analysis. Why is it cheap? Relative value analysis.
- Discounted cash flow process and normalized earnings analysis.
- Risk free rate, Return on capital employed, Working Capital and Fixed Assets.
- Is it cheap - decent. Justify it on an absolute basis.
- He prefers cheap stuff in good business-cheap and good.
- Is it a value destroyer? A Capital destroyer.
- Define your terms - Free Cash Flow.
- Pre-tax and after-tax returns
(1) Is it cheap and
(2) a good business?

Analyze Cash Flow Statement

- Insider Activity. Are they buying or selling stock?
- Growth rates - why chosen? Why that rate.
- Pick good comparables--
- Pissing cash away-then what are they doing-convince me why they make sense.
- 2 different businesses-then must do sum of the parts analysis.


## Understand LBO modeling

Nice cash earnings but they are doing bad things with the cash flow? Buying stock at low prices? Do some LBO modeling. Explain your assumptions.

Rest of semester - current.

2 weeks - Risk Arbitrage and Activist Firm: Eric Rosen.

## The Spin-off community is small. You can make 10 times your money. Liquidity constrained.

Relative and absolute returns with micro-cap stocks. Very lucrative-get rich. Less than $\$ 150$ \& $\$ 200$ million market cap. Small group cycles with new people. The old people get rich and become liquidity constrained.

## Learn the trade. Work, patience and where to look. A CRAFT

Types of Divestitures:
Restructuring Shareholders' Claims. The most common methods for creating new classes of stock include corporate spin-offs, equity carve-outs, and tracking stock.

In a pure spin-off, the company distributes to its shareholders new shares of stock representing $100 \%$ of ownership of a company subsidiary. After the distribution, the subsidiary trades as an independent public company, while the original parent company shares become claims against the firm's remaining assets. There is a complete physical and legal separation of parent and subsidiary operations. Small cap spin-offs have higher returns than the market and larger cap spin-offs.

Tracking stock, in contrast, represents a "pure" claim against the profits generated by a specific segment of the firm's operations-but the segment continues to be part of the consolidated business entity. New shares are distributed pro rata to the shareholders. These new shares represent a 100 percent claim on the profits of a subsidiary; the parent company shares become a claim on the rest of the business. Alternatively, the new shares can be sold for cash in an initial underwriting or issued as payment in an acquisition. Tracking stock produces the same equity structure as a spin-off, but the firm's corporate and organizational structure remains unchanged. One Board Of Director, one Corp. Charter, etc. The value of a tracking stock depends upon corp. overhead allocations-there must be large synergies between the firms.

In an equity carve-out the firm sells a portion of the stock in a subsidiary for cash, usually in a public offering. The main difference from a spin-off, is that carve-outs bring in new capital to the parent company. Equity carve-outs increase shareholder wealth. Also, it results in new shareholders. Carve-outs are more expensive to implement and subject to more securities law disclosure requirements. Carve-outs also have positive cash-flow effects vs. spin-offs. Many firms look to equity carve-outs as a means of reducing their exposure to a riskier line of business.

Riskier and more highly leveraged firms choose to go the spin-off route.

## Voluntary liquidations or bust-ups

If the market value of the firm's assets exceeds the value of the firm's equity, a liquidation may need to be considered. This is more likely when the stocks prices of other firms in the same industry are not also depressed.

## SEARS CASE STUDY (SPINOFF)

Page 1-Sears—Dean Witter, sell Allstate. $20 \%$ stake sold to the public. Raise money, then $80 \%$ spun off. Parent gets no money.
Sell 20\% of Allstate-What does it mean for SSI.

Distribute $20 \%$ so subtract $80 \%$ from Sears. Spin-off strengthens the ability to use stock compensation. Does $\$ 28$ make sense on a stand-alone basis? Parent company wants to retain $80 \%$ of spin-off so it can use the Cash flow for consolidated tax treatment.

Tracking Stock- Legal entity - participating in income stream but not actual ownership
Allstate- spin it off to showcase the value of Sears.
Understand big picture.
1 share of Sears $=0.4$ Dean Witter .
After sale of 20\% Dean Witter
\$35 = \$14
\$39 of Sears and \$14 of Dean Witter---Sears at \$53

Not a public market for Allstate right now, but it has a public market value. is at $\$ 28$ and you own 380 million shares. Then subtract that from Sears and get where Sears is trading separate from Allstate.

PARENT: Sears, Roebuck \& Co. (S) SPIN-OFF: Dean Witter, Discover \& Co. DATE: 7/13/93
Sears wanted to turn itself into a pure play in retailing.
June 30, 1995 spun off the last of its big subsidiaries: Allstate Corp.
Sears valued at $\$ 17$ a share in January 1993, now trades at $\$ 54$, up $300 \%$ in 3.5 years.
Sears' shareholders received .40 shares of Dean Witter for each share of Sears' common stock they held (Dean Witter had completed an IPO on March 1, 1993 at $\$ 27$ a share.

Allstate was spun-off in June 1993 with the issuance of 439 million shares at $\$ 27$ each. Sears spun-off the remaining 80\% of Allstate Insurance in June 1995.

Sears was merely selling or distributing businesses it already owned. By taking Sear's stock price and subtracting the market value of its remaining stakes in Dean Witter and Allstate, a value for the rest of Sear's assets, primarily the department store, could be calculated.
$20 \%$ stake in $D W$ at $\$ 27$ per share. DW at $\$ 37$ per share; Allstate's stock was around $\$ 29$ per share; Sear's stock stood at about $\$ 54$ per share, but $\$ 27$ plus $\$ 37=\$ 64$. So 1 share of Sears would get .40 of DW or $\$ 15$ worth of DW stock. $\$ 54-\$ 15=\$ 39$ for the remainder of Sears which owned $80 \%$ of Allstate. If you owned 1 share of Sears, you owned 1 share of Allstate -both had 340 million shares.
\$39 of total Sears minus \$29 of Allstate nets to \$10.00 for Sears' Retailing. Take out \$2 or \$3 for Sears Mexico and $\$ 2-\$ 3$ for Coldwell Banker, which leaves you approximately $\$ 5.00$ per share or $\$ 1.5$ billion for the retailer with $\$ 27$ billion in sales. It is an almost debt-free retailer with huge real-estate opportunities.
$\mathbf{\$ 5 . 0 0}$ per share with $\$ 79$ per share in sales and with no debt. A lay up!
Comparison with JC Penny showed sales of $\$ 78$ per share and a market price of $\$ 44$ per share or $56 \%$ of sales vs. 6\% for Sears. 8x cheaper. A HUGE disparity!

Looking at what insiders are doing is a good way to find attractive spin-off opportunities. Insiders may benefit if a spin-off trades at a low price. Shares of a spin-off are distributed directly to parent-company shareholders and the spin-off's price is left to market forces. It may be in management's interest to have the prices trade lower so as to get a lower price for incentive options.

Internet stock-like Allstate-is the price sustainable?
Know differences between tracking stock and spin-offs.
Not a natural buyer for this conglomerate here: SEARS. Weakness in Allstate is shielding the value in Sears? What is the reason for the spin-off?

Using the price of $\$ 53.125$ for Sears After $20 \%$ sale of Dean Witter, $\$ 35.25$ for DW, then Sears will drop by $\$ 14$ to $\$ 39$ per share. Sears owns 340 million shares of Allstate and Sears has 340 million shares outstanding.

Barrons article mentions Sears analysis by Mike Price on July 5, 1993.
\$1.7 Billion market cap for Sears with 27 billion in sales. NO DEBT. 6 cents for Sears' $\$ 1.00$ in sales.
Sears is a crappy retailer so compare with JC Penny which has $\$ 10$ billion in LT debt. $\$ 2.4$ billion market cap. 12.4 billion EV for Penny.

| Company Comparable | Sales | Market Cap |
| :--- | :--- | :--- |
| Sears | $\$ 1.00$ | $\$ 0.06$ |
| JC Penny | $\$ 1.00$ | $\$ 0.62 \quad$ 10x more! |

So, if Sears was comparable then it would trade at $\$ 50.00$-a ten bagger!
BIG GAP between $\mathbf{\$ 5 . 0 0}$ and $\mathbf{\$ 5 0 . 0 0}$. Why did this occur if the market is efficient? These things just happen. Stuff happens. Greenblatt sold Sears off at \$30 to \$35. In the special situation world some things are slam dunks. Be aware that this can happen-a slam dunk laid out for me by Mike Price.

Stub stocks.

## NOTES from CLASS

People can be stupid: This is an extreme example. 3-Com----Palm. You could create the rest of 3-Com for $\$ 17$-Worth $\$ 10.00$ paid $\$ 17.00$ for a $\$ 10$ value which had $\$ 7.00$ in cash.

3Com at $\$ 60$ and Palm was at $\$ 180$. 3Com owned Palm. For every share of 3Com you owned, they owned $\$ 77$ of Palm. You could create the rest of 3Com (no debt) for - $\$ 17$ per share (\$60-\$77). I could buy that $\$ 10$ per share of which $\$ 7.00$ in cash while being paid $\$ 17.00$. I am short Palm. Stuff could happen-the stock is called in on you.

On March 2, 2000, the data-networking company 3Com Corp. sold 5\% of Palm, Inc. subsidiary to the public/ The remaining $95 \%$ of Palm's stock would be spun off to 3Com's shareholders in the next few months; for each share of 3Com they held, investors would receive 1.525 shares of Palm.

So there were two ways you could buy 100 shares of Palm: By trying to elbow your way into the IPO, or by buying 66 shares of 3Com and waiting until the parent company distributed the rest of the Palm stock. Getting one-and-a-half shares of Palm for each 3Com share, you'd end up with 100 shares of the new company-and you'd still have 66 shares of 3Com.

But who wanted to wait a few months? While 3Com was struggling against giant rivals like Cisco, Palm was a leader in the hot "space" of handheld digital organizers. So Palm’s stock shot up from its offering price of \$38 to close at $\$ 95.06$, a $150 \%$ first day return. That valued Palm at more than 1,350 times its earnings over the previous 12 months.

That same day, 3Com's share price dropped from $\$ 104.13$ to $\$ 81.81$. Where should have 3Com have closed that day, given the price of Palm? The arithmetic is easy:

- Each share of 3Com share was entitled to receive 1.525 shares of Palm
- Each share of Palm closed at $\$ 95.06$
- 1.525 x $\$ 95.06=\$ 144.97$

That is what each 3Com share was worth based on its stake in Palm alone. Thus, at $\$ 81.81$, traders were saying that all of 3Com's other businesses combined were worth a negative $\$ 63.16$ per share, or a total of minus $\$ 22$ billion! Rarely in history has any stock been priced more stupidly.

But there was a catch: Just as 3Com wasn’t really worth minus $\$ 22$ billion, Palm wasn't worth over 1,350 times earnings. By the end of 2002, both stocks were hurting in the high-tech recession, but it was Palm's shareholders who really got smacked-because they abandoned all common sense when they bought in the first place.

Further discussion: www.nber.org/papers/w8302

Be aware if the Spinoff creates a taxable event. Be aware of the tax ramifications.
How to do stock screens-in another class. Form 10 for Spin-offs. Spin-off Calendar.
Announcements occur 6-9 months before for spin-offs.
The intelligent investor excels by making decisions that are not dependent on the accuracy of anybody's forecasts, including his or her own.

Yesterday's losers are often tomorrow's winners. Look at the list of new lows for the past 52 weeks.
Spin-offs have done very well and so have the parents. Spin-offs beat the market by $10 \%$ a year. I hope you can do better. Spin-offs are a happy hunting ground. After I wrote this, spin-offs did not do well. People say after 6 months, "Oh, this doesn't work well." They quit.

I will mark the spin-off dates on my calendar. Bottom line I do valuation work. Bottom-line I try to do valuation work. I buy $\mathbf{\$ 1 . 0 0}$ for $\mathbf{\$ 0 . 5 0}$ to $\mathbf{\$ 0 . 6 0}$.

## Risk Arbitrage and Merger Securities

## Paramount Communications, Inc./ Viacom Case Study

Sept. 1993, Viacom wanted to purchase Paramount Communications. Viacom announced a merger with Blockbuster Entertainment. Viacom purchased Paramount's $50.1 \%$ of stock. The method of payment for the remaining 49.9\% of Paramount?

Back-end payment for each share of Paramount consisted of Viacom common stock, exchangeable subordinated debentures of Viacom, securities known as contingent value rights (one for each share of Viacom common stock received in the merger, (4) three-year warrants to purchase Viacom stock at $\$ 60$ per share, and five-year warrants to purchase Viacom stock at $\$ 70$ per share.

Most of Paramount shareholders were of interest in owning the shares of an entertainment conglomerate or the stock of the takeover candidate so the other securities would have little interest.

What is all the stuff in the Proxy? 3 page section called "Paramount Merger Consideration." Opportunity: combining the purchase of one share of Viacom common stock with the purchase of one contingent right (CVR) created a unique investment opportunity.

Contingent-value right was a security issued by Viacom to help guarantee the value of the back-end securities that Paramount shareholders were to receive in the merger.

If Viacom traded below $\$ 48$ on year after the completion of the Paramount merger, Viacom would make up the difference through a payment to holders of the CVRs. If Viacom traded at $\$ 44$ at the one year anniversary of the merger's close, Viacom would pay $\$ 4$ for each CVR. So buying on CVR with each share of Viacom, an investor would ensure that the combined value of the two securities would be at least $\$ 48$ in one year.

If Viacom traded at $\$ 55$, even better than the guaranteed $\$ 48$ price. Since, shortly after the merger was completed, one CVR and one share of Viacom stock could be purchased for a combined price of $\$ 37$, a guaranteed price of \$48 in one year looked pretty good-a $30 \%$ annual return with little risk and no upside limitation.

Viacom limited the payout on the CVRs to a maximum of \$12; Viacom could fall to $\$ 25$ before an investor who bought both the CVR and Viacom stock for a combined $\$ 37$ would lose money. Viacom could extend the payment date of the CVR but only in exchange for a payout larger than $\$ 12$.

## It pays to check out merger securities! Only invest in the ones that are attractive and that you understand.

Five year warrants at a price of $\$ 70$ for a share of Viacom that could be paid with $\$ 70$ face value of one of the other Paramount merger securities.

Which merger security? The exchangeable subordinated debentures I mentioned earlier.
I could buy $\$ 70$ of face value of these securities for only $\$ 42.00(60 \%$ of $\$ 70)$. I would have this right for five years. Viacom was at $\$ 32$. The right to buy stock at $\$ 42$ for five years was a lot more valuable than the right to buy stock at $\$ 70$.

Buying both the warrants and debentures was a winning trade.
Notes: This is like a LBO. Viacom borrows a lot of money to buy Paramount. Front-end is in stock and the back end with junk securities.

Management incentivized with a lot of options.
Viacom at $\$ 36$ and Warrants for 3 years at $\$ 70$-but 3 years is a long time and the situation is very leveraged.
Viacom - $\$ 2$ billion mkt. cap and $\$ 8$ billion of debt so EV of $\$ 10$ billion. The value of assets goes up 20\% over 3 years, but the equity has been doubled. Leveraged equity. But risks require a smaller position.

Warrants are a price to buy stock at a certain price for a certain time. When you exercise these warrants you give the company $\$ 70.00$. Options are among shareholders. Page 16, use junk in 3 to pay for Viacom. Take
merger securities-debentures, 60 cents on the dollar, and put them in at face value for the stock. Pay 60 cents for debentures, but I get $\$ 1$ of Viacom stock.

60 cents bonds for five year warrants at $\$ 70$ so $60 \%$ of $\$ 70=\$ 42.00$

## When you see some weird securities falling off the back of the truck, TAKE A LOOK!

Now, not as many merger securities. Now there are many Hostile mergers. There are tons of spin-offs. Value stock at low prices and absurdly high prices for Internet companies-inefficient markets. There are plenty of opportunities all over the place.

In March there were many opportunities. Last Oct. 2002, the prices were very low.
There is so much emotions. You usually only have to wait about 6 months for opportunities. Just sit on your hands and wait. Look for weird securities, who is in charge? Look at the context. Follow the money.
$\$ 30$ million of the 3-yr. warrants.
$\$ 80$ million of the 5-year warrants.
A fallacy in risk arbitrage: no analysis of worse case scenario.
S10 take over, trading at $\$ 9.5$ so 50 cents/ $\$ 9.5$ in 4 months so a $50 \%$ return annualized. Look at true risk/reward. Make 50 cents minus cost of carry of 17 cents, so 33 cents profit. Stock goes to $\$ 4.50$ if deal does not go through.

Hostile deals are fun.
Pay $\$ 80$ per share in cash for Paramount on $\$ 45$ in cash and the rest in equity shares.
Ted Turner paid $1 / 2$ cash and $1 / 2$ in securities. Everyone hated the deal, but Turner saw value in the film library. $\$ 40$ in cash and $\$ 40$ paper trading at $\$ 20$, so purchase an $\$ 80$ asset at $\$ 60.00$.

Greenblatt shoots for a $35 \%$ to $40 \%$ annual return.

## Host Marriot/Marriot International

## Ex. From Book:

The cream of the business was charging management fees for managing hotels—Marriot International. We will spin off the assets that are loaded with debt-Host Marriot.

Spin-off the management fee business. 100 million shares outstanding. Stock trading at $\$ 4$ or $\$ 400$ million market cap. Mkt. bad for real estate.

Marriot International will back a $\$ 600$ million line of credit to Host Marriot.
No one would want the new Host Marriot because of real estate and loads of debt. The selling pressure would be enormous so values would be interesting.

Non-recourse debt so I would have $\$ 6$ of value after subtracting all the debt.
WHAT I look for:
Institutuions don't want it (and their reasons don't involve the investment merits). Many thought that Host Marriot was loaded with unsaleable real estate and crushing debt. Also the size of the company was smallaccounting for only $15 \%$ of the total value being distributed to shareholders.

Insiders want it-Key! Are the managers of the new spin-off incentivized along the same lines as the shareholders?

Stephen Bollenback would become Host's chief executive. Marriot family would still own $25 \%$ after the spinoff.

Investors were interested in hotel management not owning hotels, therefore the sales of stock solely for this reason would not be based on the specific investment merits and therefore, might create a buying opportunity.

## A previously hidden opportunity is created or revealed.

Host had tremendous leverage. Host would trade at $\$ 3-\$ 5$ per share but it would also have $\$ 20$ to $\$ 25$ in debt per share. Say assets worth $\$ 30$ per share, so a $15 \%$ rise in value of the assets would double the stock ( 0.15 X $\$ 30=\$ 4.50$ ). For every dollar of debt transferred to the new spin-off company adds a dollar of value to the parent.

Marriot International, the "good" company was on the hook to lend Host up to $\$ 600$ million.
Say what you will about highly leveraged companies, the rewards of sound investing and good research are vastly multiplied when applied in these leverage situations.

Host could be a good pick because:

- Most institutions were going t sell their Host Marriot stock Before looking at it, thus creating a bargain price
- Key insiders appeared to have a vested interest in Host's success, and
- Tremendous leverage would magnify our returns if Host turned out, for some reason, to be more attractive than its initial appearance indicated.

Identify where you think the treasure lies.
Host Marriot Page 30, last column on the right. $\$ 2.6$ billion of debt and convertible preferred stocks ahead of the equity.

100 million outstanding shares outstanding. Say $\$ 4.00$ price or $\$ 400$ million, so $\$ 3$ billion valuation. Most of debt will be in HMA holding ( $\$ 2$ billion of debt). Still $\$ 600$ million of debt on the parent of Marriot. This debt is only recourse to HMA Holding.

One hotel is the San Fran Marriot--\$250 million of debt was non-recourse. Now get worth of that debt. $\$ 6$ of value after subtracting all the debt. Anything in HMA Holding is worth over $\$ 2$ billion. My $\$ 6$ is in the debt free in parent. The value is probably worth $\$ 12$ per share if I was right. The key was that the debt was non-recourse.

Buying $\$ 4.00$ where it is worth $\$ 6.00$ in the parent with a call on the other stuff perhaps worth $\$ 12$. I could buy a lot of it because, it seemed very low risk.

Question: When to sell. Bought FL at $\$ 10$ and now it is $\$ 17$. Think it is going to $\$ 27$ in two years. I usually sell based on valuation. I pick my valuation as to how long I wish to wait.

If what I buy works out is OK even if I let another 13 go buy. It doesn't hurt me not to invest. Remember don't lose money! Patience. Swing at your pitch.

Do my valuation work and if the stock gets cheap enough, especially for a business I like, I will buy if the price gets cheap enough.

Form 10-12 for spin-offs. 10-K Wizard is excellent. Look for spin offs. Key words-spinoff, distribution etc.

Rights Offerings: a parent company may give its shareholders the right to buy stock in one of its subs or divisions.

When a rights offering is used to effect a spin-off, it is worthwhile to pay close attention. Often used to raise additional capital.

Rights that are not exercised or sold expire worthless after a set time period.
Rights offerings are obscure and often confusing. Throw in the neglect and disinterest displayed by most instit. Investors towards spinoffs, and you have an explosive combination.

A parent will generally distribute to its shareholders rights to buy shares in a spin-off.
At the time of the offering, it is not known whether the spin-off will trade above or below the purchase price set in the rights offering. No need to seek the highest possible price. In a rights offering, since all shareholders of the parent have an equal opportunity to purchase stock in the spin-off-shareholders have been treated fairly and equally.

BARGAIN PURCHASE: the inclusion of oversubscription privileges in a rights offering. The right to buy additional shares if the rights offering is not fully subscribed.

FOLLOW THE MONEY! No matter how a transaction is structured, if you can figure out what is in it for the insiders, you will have discovered one of the most important keys to selecting the best spin-off opportunities.

Shares of a spin-off are distributed directly to parent-company shareholders and the spin-off price is left to market forces. Often, management's incentive-stock-option plan is based on this initial trading price. It pays to check out when the pricing of management's stock options is to be set.

There are few investment areas where insiders have such one-sided control in creating a new publicly-traded company. Analyze the motives of insiders in spin-off situations.

## Liberty Media/Tele-Communications

This was a 10 bagger in less than 2 years. A right is somewhat like a short-term warrant. This situation was artfully designed to create the most upside potential for those who participated, while simultaneously discouraging most investors from taking advantage of the opportunity.

Began Jan. 1990. Tele-Communications, the country's largest cable operator, announced its preliminary intention to spin off its programming assets like QVC and the Family Channel-assets est. to be worth nearly $\$ 3$ billion. There was pressure to limit the ability of cable-system operators to own interests in program providers. The goal of the spin-off was to alleviate some of that govt. pressure by separating the company's programming assets from its controlled cable systems.

In March 1990, Shareholders were to receive rights that would entitle them to exchange some of their TCI stock for shares in the new company. If a rights offering is structured properly, shareholders are only taxed based on the value of the rights received.
$\$ 600$ million value of entity to be spun off. TCI had a total capitalization of $\$ 15$ billion ( $\$ 6$ billion of equity value and $\$ 9$ billion in debt). The size of the Liberty spin-off was going to be an unimportant sideshow as far as most institutional investors were concerned. (Classic opportunity).

2 million shares to be issued in the spin off vs. 415 million FD in TCI.
Liberty considered unattractive by the media.
Tele-Communication's shareholders were to receive one transferable right for every 200 shares they owned. Each right, together with sixteen shares of Tele-Communications, could then be exchanged for one share of

Liberty Media. At a price for TCI of $\$ 16$, the price was $\$ 256$ per share of Liberty. For 415 million shares of TCI-for every 200 TCI shares held translated into the approx. 2.1 million shares of Liberty to be issued. Institutions would consider the stock too illiquid. A price over $\$ 250$ would be considered awkward.

The amount of Liberty shares issued would be equal to the amount of rights exercised. If only 1 million rights were exercised to purchase Liberty stock, only 1 million shares of Liberty would be issued-not the theoretical maximum of 2 million shares.

A sale of 1 million shares in exch. for $\$ 256$ worth of $T C I$ stock would equal a purchase price of $\$ 256$ million for all of the common equity in Liberty Media (instead of a potential $\$ 512$ million cost if all 2 million shares were purchased). Since Liberty would own the same assets, regardless of whether 1 million shares of common stock were issued or 2 million shares, anyone interested in Liberty's upside would much prefer to split that potential among fewer shares.

Any stock not sold in the rights offering would be replaced by preferred stock to be owned by TeleCommunications. Any shortfall was to be made up through the issuance of $\$ 250$ million of Liberty preferred stock to TCI-terms very favorable to TCI.

The FEWER shareholders that participated in the Liberty offering, the more leveraged the upside potential for Liberty's stock. Better, this leveraged upside would be achieved not through the issuance of debt but through the issuance of low-cost preferred stock.

The success of Liberty would be of material importance to Malone. He had an option on 5\% to $10 \%$ of the company.

The loss of $\$ 9.77$ wasn't as bad as first appearances, since other assets were not consolidated-the stakes in equity of other companies.
Liberty set up as a vehicle for TCI's programming ventures. TCI's programming muscle would benefit little Liberty. Help in the upside.

Liberty's problems include an illiquid stock, a terribly complicated asset and capital structure, and a lack of initial cash flow from its investments.

The owner of 200 shares of $T C I(\$ 3,000$ of $T C I$ stock at $\$ 256$ per share) received a right worth less than $\$ 1.00$.
Malone was able to keep nearly 20 percent of Liberty's upside for himself compared with his participation in less than 2 percent of TCI's upside. Malone would use TCI's clout to help Liberty.

Class Notes:
1 share $=1 / 200$ of a right. (go through the hand-out). Very unattractive to do.
Consolidated statements looked horrible. \$320 million.
2.1 million common at $\$ 250$ per share. Why own illiquid stock when you own 320 million shares of the parent stock. Many rights expired worthless so less OS issued for Liberty. The $\$ 250$ stock went to $\$ 3,000$ in two years.

400 page prospectus. Every shareholder had the same right as Malone. This is a multi-billion dollar opportunity. There are many other smaller opportunities in smaller deals.

Institutional Framework.
Thinking of how to think.
Learning curve of a few years in finding Spin-offs. The world evolves. I am not the most sophisticated analyst, but I do have a very good context to evaluate what I am looking at. Thinking about how to think. It
is simpler than you think. It is not going to be based on a 40 page analysis but it is on finding a big opportunity and acting on it. The special situation world has lots of opportunity.

GOOD LUCK on your project.

## END

Greenblatt Class \#7
Oct. 22, 2003.

## Look at Marshfield Associates

## Companies to research

| CI | HCA | SMRT |  |
| :---: | :---: | :---: | :---: |
| ALOY | FL | FMC |  |
| RCI | MHS | FTS |  |
| BKS | POS | S |  |
| AOC | PSS | HHGP |  |
| LAF | PSS |  |  |
| S | LAB | HOFD (Screen) |  |
| ABS | FCN | CTGI (Screen) |  |
| SLE | TBC | DFS (Screen) |  |
| TMK | ANF | NLS (Screen) |  |

Eric Rosenfeld is a benevolent Carl Icahn. He started in Risk Arbitrage. He now focuses on activist investing in Canada where the laws are friendlier shareholder laws. With 5\% share holding, you can requisition a shareholder meeting.

Canada is a good place for activist investor. Laws more favorable for investors. Also there is less competition in Canada from US investors. If you own $5 \%$ of a company you can requisition a shareholder meeting and company must have a meeting within 71 days.

By serving as our own catalyst-trying to bring out that value whatever that value-you can help control the process. You want the price mis-priced for some reason-there is some extraneous event that has caused such an event.

## Spar Aerospace

Chairman in 1998. Then sold company in 2001 to a large US defense company. The company had $\$ 8.50$ per share in cash, trading at $\$ 9.00$ and no debt.-a surplus. Enterprise/EBIT of 3 xs. The maintenance part of company was the most attractive part of company. The price of the stock declined all through the 1990's. The company had a market cap of $\$ 130$ million vs. $\$ 140$ million of potential liabilities (AMC lawsuit before a judge) in legal costs in CA. Settled for $\$ 13$ million. There was an insurance cap but not there if fraud. Usually you should discount this.

We paid cash to shareholders with a return of capital; we put in a stock buyback; we offered a dividend; we closed down underperforming divisions.

Stock trading at $\$ 9$ with $\$ 8.50$ in cash. 15 million in OS. $\$ 20$ million in EBITDA with $\$ 3-\$ 4$ million in yearly capex. So 1 times greater x EBITDA. Enterprise value was $\$ 0.50 \times 15 \mathrm{OS}=\$ 7.5$ million EV over $\$ 16$ million in EBITDA, but lawsuit greater than market value of the company.

The analysts thought the trail was before a jury in CA, so they just threw up their hands and did not do further work. There was an insurance cap as well. Either an analyst doesn't cover a company or there are other issues that they can't research or understand.

The deal took three years.

## Wild Wetman

25 million OS. 24 million non-voting. 2 families own 1 million in voting shares. $\$ 18$ price. Put a resale to liquidate the company-message to the Board. The company's board had little respect for the minority shareholders. $57 \%$ vote for liquidation.

1 year later sold at $\$ 45$ vs. $\$ 18$ price then. The assets were there.
CallNet in Oct. 1999. Sprint in Canada. Ouster of management. $\$ 2$ billion on debt.
What is the Opportunity Set for Canada today? Answer: It is still very good. I am on the Board of three companies

Atock (adock) Technologies in Montreal. Work-force planning software--scheduling. Scheduling aircrews.
Stock at $\$ 3.00$ with $\$ 2$ per share in cash--mispriced by events. $3 x$ EBITDA. Now at $\$ 4.00$
Pivotal Corporation 80 cents with no debt, but losing money. Most of assets in cash. Now at $\$ 1.76$ per share-sold. The deal should close next month.

Sierra Systems: in Vancouver, Canada 140 million in sales. A system Integrator, no debt, EBITDA margins way below Industry. Run for the benefit for employees instead of shareholders.

Dutch Auction: We try to determine the highest price for buying. We will buy $40 \%$ of the company in a set price range. The market dictates the price.

Dutch Auction - offer to shareholder. Set $\$ 6.60$ to $\$ 7.75$. Buy up to $25 \%$ market dictated system.
Pay attention to debt. Note all the ramifications of debt. He serves as his own catalyst to bring out the value.
CPI aero-structures on AMEX. A liquid business, but has much debt. Bot $17 \%$ from company at $\$ 4.00$. $\$ 10.20$. $\$ 3.25 /$ Share in Ebitda. Electronics masked the great returns in the defense business. Liquidate one business, pay off debt. EV/EBITDA about 3.5X with EBITDA growing at 50\%. Good investment.

Hollinger-a disaster. Controlled by Conrad Black. Corporate governance issues.
Are buy backs accretive to cash flow? Not based on book value.
Holding period is from 3 months to 5 years.
You must be prepared to carry the fight to the end.
How do you source investments: Just in Canada and US. Reading papers in Canada, US, Investment bankers coming to us, screens.
I work towards consensus and by showing the other parties that my way is best for all. $30 \%$ to $50 \%$ return in a short period of time. A longer period would require a higher return-100\%.

## RISK - ARBITRAGE:

Spreads have been $3 x$ the risk free rate. Not worth it. The risk is in the deals not going through.
Spread from today to where the price would be if deal consummated.

- Merger
- Tender Offer-a buyer offers to buy shares from the shareholders.
- Liquidation
- LBO's in the 1980s put up $10 \%$ to $15 \%$ of the equity but now the requirement is $35 \%$ of the equity.
- Recaps
- Self Tender- Dutch auction
- Spin-offs

There is a lot of capital and few deals.
$\$ 105$ cash merger, trading at $\$ 100$ to $\$ 5 / \$ 100=5 \%$ with 4 months to close $=15 \%$ cash deal.
The brokerage firm has the shares in a depository. Letter requesting a shareholder meeting and the purpose.

Stock for Stock deal

| Stock A |  | Stock B |
| :---: | :---: | :---: |
| 1 share of A | $=$ | $1 / 2$ share of B |
| \$20 |  | \$42 |

Dividends: if long you get dividend and if short you pay dividend.
$1 / 2$ of B = \$21.
1 dividend of 25 cents with A while losing $1 / 2$ of 30 cents with B or 25 cents $-1 / 2$ of 30 cents $=25$ cents -15 cents = 10 cents. $\$ 21.10 / \$ 20=5.5 \%$ spread or $22 \%$ Rate of Return

If deal BLOWS UP, you lose \$10. What could go wrong? FTC, Justice Dept., time delay. $15 \%$ for LT holding vs. 35\% for short term holding. Stock declines, Sept. 11, other deals break (UAL in 1989).

Now First Data Corp buys Concord EFS, owns 64\% of (10\% of EFS market) of Nice Network. EFS has 60\% market share so with combo, it would own $64 \%$ of check market. To avoid Justice Dept., spin off Nice?

78 cents spread with FTC at $\$ 36.03$ and EFS at $\$ 13.63-5.7 \%$ differential. Lose $\$ 5.00$ but make $25 \%$. Not worth it. A game of chicken.

## Stock Screening is a valuable tool—Joel Greenblatt.

ABXA Spin-OFF. DHL offered to buy Airborne Express. but a foreign company (DHL) can't own a US airline. So prior to the Merger, Airborne Express would spinoff its airfleet. One of those weird things that happens as a result of a merger. Where DHL offered to pay 21.25 and a half. In addition, you would get a spin off at a price of $\$ 0.50$ to $\$ 1.00$ in a company that was expected to make from $\$ 0.30$ to a half Dollar! Equity in ABXA would continue to do Airborne's air express business. Stuff likes this happens all the time.

There is room to get other air business at higher margin. Spin-offs are happy hunting grounds. You have a $\$ 21$ stock and a $\$ 1.00$ spin-off.

Issue: Is this really an independent airline or was DHL controlling it? If the spin-off doesn't go through, all the trades are cancelled. If the merger structure doesn't go through, the spin-off is cancelled. All trades cancelled and no funds transferred.

Joel Greenblatt is not a specialist, but I know where to look and how to think. Retail—everyone looks at same store sales, but $30 \%$ ROIC so that is good enough for me. I look for NORMALIZED EBIT THREE YEARS OUT. If there is something I can't figure out, I don't do it. Low EV/EBIT and high ROIC, then a place to look. Return on tangible capital. EBIT/Working Capital and fixed assets.
What is the balance sheet made up of?
Screens: out of 10 names you will probably have 1 or 2 good names.
Factor Models: 5.5 EBIT but show with a ROA. Review author of inefficient markets. Companies may be a good buy that don't fit all the criteria. The combination of two factors is very high, thus you can find good companies. Screened companies that are trading with net cash minus LT debt. 3x EBIT. SPAR had a lot of cash and 2 xs EBIT; the problem is a big lawsuit-then do your research.
Look for low price/BV companies; look for high cash per share companies. Screening is an art.
Small Cap: greater than $\$ 50$ million and less than $\$ 500$ million. You can always find names. People over react.

Unfortunately, you have to do some amount of work.

## Pound into your head: where to look and how to think. Where I look.

1. I look at Trailing 12 month EBIT and then try to come out with a normalized EBIT a few years out.
2. Is the price cheap enough to take out the uncertainty?

## 3. Low normalized EV/EBIT and

## 4. Good returns on capital!

Am I buying it at a low enough price relative to normalize EBIT a few years out in a company with good returns to capital so as to have a margin of safety in case I am wrong?

I use a broad brush screens. Power screen. Market Guide from multex. Much cheaper. Compustat is expensive.

Look at the balance sheet and see what the balance sheet is made up. Some businesses don't need much inventory so don't be so concerned with dropping ratios, etc. What is a material part of their business?

You look for certain clues. You pursue one point. Paramount deal-the interesting securities-I pursued.
Note that Return on Assets is tougher than return on tangible assets because you need a return on intangible assets.

Ask if the screen is too cheap.
Screens: Assoc. of Individual Investors, Power Investors, Compustat.

## Look at Merck/Medco Spinoff.

Use 10 K Wizard. Bad news: easy to find things, but people still need to do the work. Word Search: maximize shareholder value, spin off, rights offerings.

There is a learning curve of a few years. You can make a living pursuing this strategy. I do have a good context of what I am looking at and I am disciplined.

Think about how to think. Think about what context to put things on-then things are simpler than you think. You can 40 pages of analysis. It is more like: Hey, it is worth $\$ 10$ but it is trading at \$3! It should be obvious.

## END

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## Greenblatt Class \# 8

Oct. 29, 2003
A Guest, the sister of Joel Greenblatt, Linda, runs a fund focused on retail stocks. Earning in the high 20's return. There are several hundred retail stocks to choose from.

It shows how well you can do if you focus on your niche by staying within your circle of competence.
(Sonkin runs a much smaller class so there is more interaction and student individual presentations in microcap stocks).

Analysis of competition
Whole consumer sector
Retail - monthly flow of store sales. Frequent information flow.
Same store sales comparison
Store growth and ROIC of stores.

| Companies | ANF | AEOS | PSUM | WTSLA |
| :--- | :---: | :---: | :---: | :---: |
| Cash | 400 | 209 | 80 | 90 |
| EBIT | 322 | 128 | 89 | NA |
| EV/EBIT | 7.7 | 7.5 | 11.8 | NA |
| P?E | 13.4 | 15.8 | 24.8 | NA |
| EV/Sales | 1.6 | 0.6 | 1.2 | 0.5 |
| Net Cash/Share | 4.0 | 2.9 | 0.76 | 3.04 |
| Total Stores | 672 | 912 | 855 | 622 |
|  |  |  |  |  |

$A E O S$ is going more into lower class malls than $A B E R$. What is growth potential?
All these companies have a cash balance. When you look at P/E, you might want to take out cash and focus on their earnings on operations.

Understand concept, customer base, location, know price point differential. For example, a sweatshirt at Abercrombie will sell for \$35-\$40 versus \$25 at Eagle Outfitters.

ANF is at $\$ 28.80$ (as of Oct 29, 2003) and it has $\$ 4.00$ in cash, so $\$ 28.80$ minus $\$ 4.00$ in cash $=\$ 24.80$ divided by earnings of $\$ 2.50-10 x$ multiple.

Where these concepts can go depend on where the stores are located. The core Abercrombie concept has to be at a better mall. 700 A Malls, 800 C Malls.

Is concept maturing? What new concept is coming next?
ANF will max. out about in about 400 more stores in A Malls. If ANF does not have growth potential in its core product, what are they doing now to grow?

Hollinger-is there a new concept for ANF. Their growth is slowing.
Nautica: an apparel company trying to be a retailer. A failure.

How to evaluate Brand value? A good question. ANF was once hot--they could sell anything at full price. That is not sustainable. Never try to value a company four or five years out based on popularity.

Get an understanding of where these companies stand today. ANF is in the best position today. Their core concept is old, but they introduced Hollister which is very hot. Aber. Is more east cost concept and Hollister is more of a West Coast Surf concept. Hollister has 150 stores so it has good growth potential ahead of it.

Retaliation? Price War? Does Hollister take business from Eagle? Is there room enough for everyone? Eagle has been running negative comps. Eagle was knocking off everything from Aber. And selling it for 30\% off. Then that strategy stopped working.

Eagle has tried unsuccessfully to buy into a new concept while ANF's mgt. has successfully introduced an organically conceived concept. Eagle bought an established name in Canada and has destroyed it.

Are they trying to go after their same customer base and cannibalize it? Ann Taylor has introduced Ann Taylor Loft and people can pay less for the Ann Taylor brand--so people are confused.

What happens if a brand is not as hot as it once was? ANF vs. Eagle, mgt has marketed well. ANF has done a good job at maintaining margins.

ANF has been anti-promotional. High standards of pricing and have maintained the integrity of the brand.
(Joel Greenblatt: A lot of the opportunity works better with smaller stocks).
ANF's Mgt. has improved their merchandise margins. They manage it very scientifically. ANF has maintained numbers very well.

A company won't promote haphazardly.

It is tough to analyze one store unless you go to the same store three times a month and you look at the inventory and break out the inventory.

This is the typical analyst report: what is happening to comparable store sales. Is it relatively important that they get back to their high comp store sales growth--no, not to me, if they are making good money on their stores and there is growth and it is cheap enough. Hollister is doing well but comps are down. It doesn't thrill me, but it is not important in the big picture.

Do I care what they will do in October, if I am holding for three years or more.
Comps are down 3\% but they earn returns on capital in the 60\%--a good investment. Sure the ROIC is not as great, but it is good enough depending on the price.

Take advantage of Wall Street's fixation on same store sales. Look like they have a lot of debt, but what they are on the hook for is the current market value of that store and the difference in what they owe. Knowing where you are in the retail cycle. Also, know the concept cycle.

Take out rent expense from income. There is a lot of debt. Note the current market value of real estate vs. what the stores owe. ??? Factor in lease expense and make it part of the debt.

A quick and dirty on valuing $A N F$. What is the potential build-out in their concept?
ANF @ \$350/sq. ft. sq. ft. growth potential
\$100/ABER

500 more stores for Hollister for a total of 3.2 million sq. ft. total 4.1 million sq. ft. @ $20 \%$ margin $=\$ 1.80$ EPS, $\$ 2.50$ then $\$ 4.3$ with a 12 multiple ( $15-20$ multiple for comparable stocks in retail) $=\$ 52$ and with 20 x
$=\$ 86$. Then add in expected $\$ 10$ per share in cash to grow in addition to current $\$ 5$ per share in cash--thus $\$ 15$ per share in cash $-\mathbf{\$ 5 2 + \$ 1 5 = \$ 6 7 .}$

I get the fourth concept for free. Stock is now at $\$ 29$, then take out 5 per share in cash for $\$ 24$ current price for $\$ 2.50$ EPS or 10x.
$\$ 4.30$ EPS in 4 years x 12 P/E multiple $+\$ 15$ per share in cash $=\$ 67$ in five years, so $\$ 29$ to $\$ 67$ is $17 \%$ compounded growth over 5 years.

I hope they can continue what they are doing now. They have $20 \%$ margins. $\$ 4.30$ EPS-- 4 years out.

Joel Greenblatt: At some point people (the mkt.) wakes up and the stock goes up more than $17 \%$ per year. The price does not go up in a steady manner. 19\% in one year
$A N F: \$ 1.80$ they earn in this year.
Base case for ANF without growing the business is paying $\$ 29$ today with a 10 x multiple for $\$ 2.40$ EPS and (\$29-\$5/sh cash). You have room for more than 100 ANF stores and 500 more Hollister stores. On the additional stores, ANF will earn more $\$ 2.50$. Netting after capex. and new store capex. you are netting $\$ 2.00$ per share and after five years you have an additional $\$ 10$ per share to add to the $\$ 5.00$ per share in cash. There are things you can do with the cash like buy back stock (adding value to this scenario).

Lumpy returns: year 1 ANF goes up $19 \%$ to $\$ 48$ then $9 \%$ annualized return for 3 years.
Hope for stellar, faster returns.
Assumptions: growth and margin of safety.
For Margin of Safety: Leaving out other good things that can happen to ANF:
$A N F$ : We get free--the fourth concept.
The margin of safety: we left out all these other possibilities. We have room for error.
Important: comp store sales. Further leverage their operations: better sourcing, etc.
Wall Street focuses on the wrong metrics. Comp Store Sales and P/E Multiples vs. growth of the business overall vs. comp. Store sales.
What is in total build out?

## Forget slapping on multiples on growth rates.

Judge quality of management

ANF focused on margins. They take a strict anti-promotional stance. They haven't slashed prices. Mgt. may panic and slash prices when a concept begins to age. They may sell goods at a discount.

Linda: Look at total build-out of stores. What will they make? Study each of their 3 different businesses. Do a sum of the parts analysis. KEY!

An 8.5\% after-tax yield--I am comfortable with that.
Simpler to do a total build-out for five years, what are margins with additional stores? Get the methodology instead of slapping a multiple on it.

ANF is improving Gross Margins and Maintaining Operating Margins.
Open and closing stores. .

Break-out the new store Capex. and old store capex. ANF does a good job allocating resources.
ANF can improve sourcing, pull costs out and increase merchandizing margins.
Keep a close eye on mgt managing the company as a business? CEO has a big options package.
$A N F$ rarely misses a number. They buy goods on sale.
A hot concept is when goods sell at any price.
Analysts say comps are down so stay away, they don't focus on the big picture. Now the stock is a double.
Focus on how much cash is generated over the period.
There could be an opportunity for Wetseal. Why are margins are down? Opportunities with low margins-turnarounds.

The guy running Gap came from Disney and he has identified parts run poorly. Fxn of a poorly run business. Where are the problems to be fixed and are the problems fixable?

Today, it is tough to find buys. Little value to be found in the market.

## Look at absolute valuation.

ANF and Eagle show the same EV/EBIT but normalized EBIT is better for ANF vs. AEM. ANF has better growth potential and management. Better normalized earnings for $A N F$ vs. trailing earnings.

Look at normalized EBIT.

END of Linda Greenblatt Presentation

Cable Vision Spin-off. People are down on CableVision because of the money thrown at the Satellite venture. The Satellite venture is losing money. They will put in three of their channels with the Satellite. Charles Nolan will run Satellite. Confusing is good. Opportunity in Junk. He doubts the business will drain capital. \$3 billion for Cable Channels. VOOM is considered just throwing money away. Cable channels very cheap but that logic takes over ad he drops VOOM.. Combined and a lot of debt.
By He might cut and run. Or the stock might get cheap enough. The stub is cheap. Keep it simple.
$\$ 3$ billion of cable channels going over to VOOM. Everyone to a man who covers cablevision says this will be a disaster. My thinking: these two will be combined, so they will be sold for a lot less than $\$ 3$ billion because they have this money drain. There is a lot of debt on this thing too. They buy the cable channels for 1.5 billion vs. $\$ 3$ billion and perhaps Nolan wakes up quickly and stops draining the money. He closes the thing down early. I can hold for a year waiting for Nolan to make a better decision. The market takes over at some point.

Nolan bought the Wiz and has made some stupid decisions but they were small. Here he is playing with \$3 billion dollars.

People view this negatively.
Don't short comparables.

## Hand-out is the Buffett Article in Barron's.

He seeks $14 \%$ pretax return. 7 x EBIT--depends on the business and its growth prospects.
Put money in treasuries, T-Bills which earns less than 1\% a year after tax. Occasionally, successful investing requires inactivity. We are trying to buy companies at $\$ 50$ worth $\$ 100$. In the short term the stock could go to $\$ 25.00$. The more confident you are, don't be afraid of short term price movement.

Drug companies are better businesses than tech companies. Companies with mystery are worth more than those without-A Ben Graham saying.

Inactivity : wait for your spots.
He prefers a lumpy $15 \%$ return vs. a smooth $12 \%$ return.
He erred by not selling Coke and Gillette at Peak $50 \times$ EPS. There is a downside to being on Boards and having huge positions--it is difficult to sell or liquefy your positions. The downside of being on corporate boards and huge positions.

He wants investors for the long term. Don't pay attention to what the market is doing. If you saw a chart of the Nekki in 1988 and saw it drop for 15 years. But in the meantime it rallied up $30 \%$ to $40 \%$. If you are trying to interpret the economy by moves in the market. It is a waste of time. Focus on valuation of companies. No logic in that $40 \%$. Look at your stocks as businesses. Value them.

A threat of a terrorist attack on Manhattan.

Pick companies on good valuation.
A student of Wharton asked BUFFETT to visit. A group of 40 students went out to meet Buffett for several hours.

Chart of NEKKII from 1988 going from 40,000 to 10,000 in 2003. Focus on company valuation and not on predicting the market.

Allete Inc. - A Spin-off for May 2004. 8 to 9 months from now. Does the auto auction seem interesting? Buy spin-off or buy combined.

KISS: anytime I get complicated, I lose. Don't short comparables. Buy \$1 that is worth \$4.00. Big enough difference for a margin of safety.
Separate out the two businesses. Easy to value and the auction business looks interesting.

Palm Spin-off - software then hardware company

## MISTAKES IN STUDENT PAPERS

## Ex. 1:

Company: David Busters Analysis:
EV/EBIT - Maint. Capex. $=6.8$ vs. Industry multiple of 28.1 so it is cheap. TEV/SALES is 0.56 vs. 1.15 x of industry.
But no mention of the reason why the company was cheap: ROIC is $6 \%$ and ROC and ROA is $4 \%$. Metrics are low because the business stinks, that is why it is low. Put $\$ 1$ in company and then the company loses money. An LBO deal fell through. The company is earning money at such a low rate that is why the company is cheap.

## Ex. 2:

The company can cover their debt:
1.4 x EBITDA (student left out capex.). \$0 free cash. Who pays for capex.--Buffett: the tooth fairy. 1986 1988 Don't leave out Capex: Seven Eleven failed: the Texas Chain Store Massacre. Deals got done, but they cratered.

## Ex. 3:

Valuation: $8.25 \times$ EBIT. In three years Normalized earnings $=\$ 3.00 . \$ 3.00 \times 8.25$ EBIT $=\$ 24.00$.
Take normalized 8.24 x depressed earnings. Normalized is higher. Competitors have depressed EBIT. If you use that for a justification for using 8.25 , your multiple is inflated. They pay lower multiple of normal earnings. At 8.25 of DEPRESSED EARNINGS, they are actually paying a LOWER multiple of NORMALIZED EARNINGS. Normalized earnings at 8.25 may be aggressive.

## Ex. 4:

Return on tangible assets. ROA vs. Return on Tangible Assets. ROA can be loaded with goodwill. In the future what return on this business without acquisition. Goodwill may mean you overpaid for business. Return on tangible assets. ROA can be depressed due to high goodwill amounts due to overpaying for acquisitions. Good returns on $\$ 2$ million in tangible assets vs. the $\$ 10$ million that the company paid for in acquisition (goodwill of $\$ 8$ million). Look at the underlying returns on that business, so look at tangible assets.

Study the difference between ROA vs. Return on tangible assets. ROA is an annual expense.

## Ex. 5:

0.7 x Book Value is cheap? Depends on tangible book. On return on assets. Have an earnings justification. Sales growing but credit is used to grow sales.

Sears has an incentive to use credit to grow sales due to its credit arm.

## Ex. 6

The Limited 2: the 7 to 14 year-old group. No competition in that space. No analysis of stores could be opened, how long to take them to open new stores, how much they will make on each store. Pick another retailer. 8 x EBIT vs. others. No comparables. Look at companies below the 7 year old market in retail and companies operating in the market above 14 year old.
See logic. Go to GAP.

## Ex. 7:

Company cheap, but it is a highly cyclical company. Very difficult to estimate normalized EBIT so either walk away or take a very low number.

## Ex. 8:

Depreciation - Capex. So much higher Depreciation vs. Capex: is this permanent or not? Be skeptical. Take a more conservative basis and do not take Depreciation over CAPEX.

## Liquidating Value:

Cash Need to make adjustments by discounting the assets other than cash based on industry comparables. Inventories (80 cents on the dollar)
A/R
PP\&E (10 cents on the dollar)
Minus debt (include liabilities)
Also, what are the liabilities to employees? Costs to exit and liquidate?

## Ex. 9:

EBIT/Net WC and Fixed Assets-came out with returns of 35\%.

Low valuation is not valid to reject based on low ROA.

## Ex. 10:

3 year average for EBIT for normalized. Be careful using a past average. Do not use trailing three years. Many folks using trailing. Use your head when you project out into the three years.

## Ex. 11:

Tech company 2 x sales, 10 x EBIT above below market multiples. Even if sales don't grow, then if it trades at these multiples, then I will make 2 x my money. At least use DCF to check or justify relative value.

Relative Value: Uses DCF: pay for this price growth.
Don't use stupid nose bleed valuation as comparables. Come to a justification with DCF analysis. Look at debt.

## Ex. 12:

Company has $\$ 4$ in cash and $\$ 11$ in receivables and stock is trading at $\$ 15$, but the student left out $\$ 15$ in debt per share.

## Ex. 13:

Telecom: Other company's trade at $\$ 2,800 /$ subscriber, and this company here pays $\$ 2,000 /$ subsriber, therefore it is cheaper. People do this with hospital beds. DCF is a reality check. This is good to know the metrics.

In a normalized environment will this earn $\$ 2.00$ per share? Do my assumptions make sense? How secure I am in making my assumptions. What are my other alternatives?

## Ex. 14:

Retailer - Dept. 56 is cheap.
Sales down $10 \%$, Inventories up $50 \%$ quarter over quarter. (they opened new stores so they had to hold more inventory). Is this something bad? Quest.

Look at some things first.

1. Big inventory business? Inventory turns 60x? not a big deal. Look behind the figures.
2. Open retail stores needed to hold more inventory. Wholesalers had sale channel down $22 \%$ and overall sales down 11\%
Is there a good reason, a good explanation for the numbers changing.

## Ex. 15:

Wholesale channels down 22\% and overall sales down 11\%. Not a good result.

## Ex. 16:

Market Cap./EBIT Ratio: WRONG! Apples to oranges comparison. EBIT has debt (before paying for debt) and Mkt Cap is net of debt.

## Ex. 17:

Owens Illinois. KKR holds $25 \%$ so it is a risk. It may be a positive. KKR maximize value, thus they could be a catalyst.

Best performing company in the industry on a EBIT/EV basis. EBIT is what you paid for the assets, etc. Not what is in the business. EV is what you paid, not what is in the business.

## Ex. 18:

Book Value is $\$ 11.50$ paid for the company but this doesn't include $\$ 3.50$ in Asbestos and environmental reserves. If they are reserves, the reserves are included in the $\$ 11.50$.

## Ex. 19:

Dover Downs has race track, slots. In 8 years you will have to spend a huge amount of CAPEX. $\$ 10$ to $\$ 12$ for maint. Capex. 6.5 million a year in additional CAPEX. Or 6 x EBIT. You are thrown off by $\$ 40$ million. Your cash flow will look higher than it really is.

## Ex. 20:

EV/EBIT vs. industry average but no break-out.
Net Income/EV. AGAIN, Apples to oranges. EV is after debt service and NI includes debt.
EBIT
+D\&A
-TAXES
-Increase in Working Capital
-Capex.

Free Cash Flow.

If you have to constantly increase working capital. Because you are sticking multiples on these numbers, you need a one time increase in WC and it doesn't happen every year, you will have a very skewed number. Look as they grow, how much additional working capital will they need?

## IMPORTANT

Look at options for management and the compensation plan for mgt. Compare option plan to salary.

A manager who has $\$ 1$ million salary vs. 100,000 options at $\$ 5.00$, then his bread is buttered through his salary.

## Look at how management is compensated. Aligned with shareholders?

Greenblatt put in a hostile motion to force management to earn more shares.
When you do projections and it is a cash earnings company. So what will the company do with the cash? Analyze how they will spend the cash:

- Acquisitions
- Dividends
- Stock Buy-Backs

Account for that cash generated into the future. Include cash generation and action in your assumptions. Adjust your share count due to buy backs.

## Ex. 21

A student suggested to Short a company because it was trading at a $28 \mathrm{P} / \mathrm{E}$ but was earning $11 \%$ ROE. But that $11 \%$ ROE included intangibles and if you included the cash per share, the returns went up to $25 \%$ ROE on tangible equity.

Then he handed back student's papers.

10K Wizard $\$ 150$ per year. $\$ 150$ more: lay out many years of data.
Do word searches such as "over-subscription privileges.
Power Investor.com

AAII.com - screening packages
Read extensively to find ideas.
END

## Greenblatt Class \#9

November 05, 2003
Always do a thorough job on valuation.
In a break-up analysis, be aware of taxes if the break up is not tax free.

## STUDENT PRESENTATIONS

## NTLS Discussion

Nautilus-Bowflex was once hot. A direct sales company. Bowflex has 30\% pretax CF yield. In Q3 sales dried up. Sales were inflated due to the nesting instinct. Competitors are selling at $1 / 2$ the price at $\$ 500$.

32 million OS and $\$ 2.00$ per share in cash. Current price is $\$ 16.00$. A short with current margins and sales declining. Costs are sticky. Look at Epinions.com. Nautilus will go after the cardio market which is greater than the weight market. 1 million shares in options.

CF: DSO 45 Dils 76.46 DPO 67.56
Nordic Track had fast cumulative sales that saturated the market quickly then there is no where else to go. Sales are like a bell curve. A very quick deceleration of sales.

Cybex has 3\% margin while NTLS has margins triple that. Expect margin erosion.

HCA - Spin off of Triad Hospitals.
Industry has significant regulatory costs.
Discretionary spending from patients.
Change cost plus pricing to fixed costs for Medicare reimbursement.

Facilities and physicians sent patients to suppliers.
Private insurers are the gateway.
Bad economics: bad debt and elective process.

Historical low for industry 6.5. Total capex
Take out the 1 time hit for fines so really at $12 \mathrm{P} / \mathrm{E}$, not 17 to 20 . $\$ 25$ billion EV, Revs at 21 bil. EBIT is 2.8 billion. EBIT to tangible is $15 \%$. 9x EV/EBIT. Bad debts and A/R is up. Good mgt.

Legal (non-recurring expenses) expenses. Adjust EBIT and legal. NI + I + Tax + min. interest.
Adjusted EBIT/Tangible Assets $=12 \%$ is a truer reflection
12x EV/EBIT, but 10x now, 15 xs at peak. $\$ 50$ share EV. FCF - repay debt and shares
4.5\% growth: $11 / 2 \%$ from demographics and $3 \%$ cost/price increases.
\$2.8 EBIT - operating income minus Interest. Legal settlement and adjust EBIT legal.

Risks and Catalysts:

- Increase in co-pay
- Regulation
- Limited expenses
- Increase in fraud

Catalyst: fraud is behind us. HealtHCAre South
Project 2007 of $\$ 4.80$ in EBIT, historical $12 \mathrm{x}=\$ 58$ or $11.6 \%$ annual return.
$\$ 4 /$ share is a steady grower. $15 \%$ for profit. Non-profit. Non-profit is less efficient and $85 \%$ of the market.
So Medicare has to support.
16 multiple vs. $10 \%$ bond yield. $\$ 64.00$ compounded is $6.67 \%$ (1/16 P/E multiple) compounded over 5 years. $\$ 3.50$ to $\$ 4.50$ in EPS.

## Sportsman VIC

If these simple metrics hit you over the head, then I have done my job. Sm-cap stock.
Buy on what info you can get. Buy an office building.
$\$ 200,000$ put in equity $\quad \$ 800,000$ in mortgage $\quad \$ 120,000$ in CF Mortgage is $8 \%$ cost
$120,000 /(200,000+800,000) \quad 12 / 100=12 \%$ return on assets
$8 \%$ of annual mortgage costs $x \$ 800,000$ mortgage $=\$ 64,000$. Then $\$ 120,000$ cash flow minus $\$ 64,000=$ $\$ 56,000$ left for equity holders. $\$ 56,000 / \$ 200,000$ in equity $=28 \%$ ROE. $12 \%$ return on assets. Return on equity is $28 \%$

I need to know both to value.
$\$ 56 / \$ 200$ or $28 \%$ = return on stock. Especially if yield locked in.
Return on exp. Capex, Normalize EBIT, EV/EBIT
Big analyst interviewed by Greenblatt. The analyst was pushing a stock that was at $14 x E P S$ and $22 \%$ growth, so the analyst slaps on a 20 multiple. When does the patent run off?

A thorough more in depth job on your papers.

ANALYSIS: DCF analysis is just a checking analysis. Comparables. Break-up analysis. Normalized EBIT
I will hand out four excellent situations that worked out well for the VIC.

## Student Presentation 1

Nautilus: NTLS. EV of $\$ 430$ million. 30\% of float is short. A direct marketing company that includes health and fitness companies. Bowflex.

Bowflex has a 30\% FCF yield. A very profitable business. A big sales boom on the back of Bowflex. Their business crashed. Yr. Over Yr. Growth dropped 30\%. Sales boosted by 9/11-the nesting instinct.
\$500 per unit drop would cause the math to change on profit margins.
Sales for these products typically flame out quickly due to the small market for the product. Once you hit saturation in the market, there is no where else to go.

What projections are needed to justify the market price?
The direct business has a $50 \%$ gross margin
Indirect business has a $30 \%$ gross margin
Sales and marketing expenses
$15 \%$ growth of the branded products such as Stairmaster, bow flex, schwinn.
Cybex has been down $4 \%$, but NTLS says they can grow at 15\%.
Stop loss of all sales despite competition at $1 / 2$ the price. Assumptions are too aggressive by mgt. We do not think it likely that NTLS will not lose sales and maintain gross margins competing against competition with products priced $1 / 2$ as low.

32 million OS.

On Cross-bow they have maintained margins but lost sales.
New product introductions do not seem to be successful. Mgt. is saying they will keep the GM. We know the cardio market is bigger than the fitness market.

Mgt. has been shady. After pre-announcing bad news, the mkt. went from $\$ 15$ to $\$ 8$ and then mgt. issued themselves options.

Sales going down 25\% per year. Either they lower price or keep margins and lose sales margins.

Our price target is $\$ 5.00$ per share. Using $12 \%$ cost of capital.
They have been acquiring businesses with $1 / 2$ the gross margins. They brought in a new management. Use an option to short. $11 \%$ margin in the indirect business so they might be able to sell.

Cybex operating margins are $3.5 \%$, so if they turn themselves into commercial/retail business it will be much less attractive business.

Risk to \$50 if they turned sales around.
Who will win this game of attrition?

## Student Presentation 2

HCA Presentation by students

A complicated value chain in the industry. The govt., insurers provide payment to the healtHCAre provider who is referring the patient to the facility.

There has been a shift in pricing from cost plus to fixed pricing.
The industry as a whole is attractive. Mgt. has been value creators and not destroyers.
WEB purchased some stock at $\$ 37$.
Mid - 6s EV/EBITDA for the industry.
Take out the 1 time hit for penalties for $H C A$, so then it is really trading at 12 times. $\$ 25$ billion market cap. Rolling trailing 12 month data. EBIT has not been quite as steady at 2.9 bil.

9 EV to EBIT multiple. 13 x when you take out all capex? All multiples have declined. What is going on underneath the company to explain this? Debt hasn't changed. Why the missed their earnings because of their bad debt--don't think this is a significant issue for the company. It has not started to sky-rocket.

We do an adjusted EBIT to account for the 1 time legal settlements and payments.
Good free cash flow. 12 times multiple averaged, 15 P/E multiple
\$37.5 mkt value per share value and \$17.50 in debt - \$5.00 in cash for EV of \$50 per share.
All FCF to pay down debt and buy back shares. Use all that FCF or $\$ 4$ per share each year for 4 years is $\$ 34$ per share in EV by 2007. During this time the base business has grown by $4.5 \%$, which is made up of $1.5 \%$ demographic growth and $3 \%$ of price growth--below the average that people are expecting for the industry.

500 mil. OS. $\$ 2.8$ million reported EBIT: NI + Taxes + Int. excluding capex.
Operating income which is $\$ 2.8$ then you have minority allocations (big neg. number), asset losses and legal settlements. We take all those numbers except for legal settlements and calling that our adjusted number--it is about $\$ 2$ billion.

We did our FCF to EV for a $8 \%$ and increasing to year 4 to $14 \%$. What are the risk to $8 \%$ and the risks to get to $14 \%$. Big risk is pricing pressure from govt. and increasing costs from regulations. There could be additional fraud.

Catalysts: the fraud is behind us and the industry will return to normal earnings. The industry fraud should eventually clear.

## Valuation Summary

Our Adjusted EBIT is $\$ 4.80$ in year 4 and using a historical $12 \mathrm{P} / \mathrm{E}$ beings us to a $\$ 58$ per share and it is also an EV since all debt is paid down.

Current share price of $\$ 37.50$ and EV of $\$ 50$ so the annual return is $11 \%$. It is an attractive risk adjusted return but it is not a clearly a 50 cent dollar.

In three years they will earn $\$ 4$ per share. An industry could grow. The hospital business has $85 \%$ non-profit business while HCA is in the $15 \%$ that is for-profit hospitals. Medicare can't cut out for-profit without hurting the non-profit hospitals.

Greenblatt: The way I would look at this in the big picture: if they do earn $\$ 4$ in three years, you put a 16 multiple--using $6 \% 10$ year bond yield--and I'm say a 6.67 percent return that is growing. Would I rather have this, $6.67 \%$ growing vs. $6 \%$ (HCA has best properties and mgt. business)-so you get $\$ 64$ per share. You could get this in 3 years. I'm looking long-term. The govt. can't run these guys out of business. LT you have to have the non-profit hospitals in business, therefore, the for profits hospitals which are more efficient, must survive. $\$ 3.50$ to $\$ 4.50$ range in earnings. The downside is not big at these prices.

## Special Situation Write-ups from the Value Investors Club (VIC)

$\$ 56$ per share value and you have a $\$ 10$ share price. What is a reasonable multiple with conservative numbers--he came out with $\$ 56.00$. He looked at a place that was very inefficient. His analysis was very simple--the key is that the numbers are there.

Nov. $12^{\text {th }}$ published and the write-up came out on Nov $27^{\text {th }}$. You could have bought this coming out of bankruptcy. They don't have to put out much cap-ex. They already have their network built out. This got one of the highest ratings.

Overhanging stock? I couldn't care less. I focus on valuation work.
This stock ran from $\$ 2$ to $\$ 9.70$ (Sportsman Stores) before recommendation--so the writer received criticism. This is super cheap. Part of it is that this is a small cap company so not many people are looking at it. If I have to hit you over the head--you have a $20 \%$ pretax yield, a scenario where it could do much better--the shift to the Internet. It was very cheap. You have a big margin of safety. Management gave the numbers.

You may know some things or you may not, but you don't have to buy all the stocks. Walk away if unsure.

## Evaluation of ROC and ROE

\$400,000 in a building.
120,000 cash flow and mortgage is $8 \%$ per year.
$12 \%$ unlevered return.
ROE: take the $\$ 200,000$ of equity $-(8 \%$ of $\$ 800,000)=\$ 200,000-\$ 64,000=\$ 56,000$ then $\$ 56$ left for equity holders/\$200 equity base $=28 \%$ ROE

Should I look at both--yes. Asset yield and equity yield. Return on stock in the ROE. 12\%--if cost of funds goes up. How you can leverage your return if the yield is locked in.

Are you looking at all the right factors? I wish I could pay a lower price, but I am willing to pay a higher price for a great business like the Duff and Phelps example.

You have to spend some time understanding the business. There is work involved in figuring out if it is worth $\$ 4.00$--normalized EBIT. The more confidence I have in the business, the more likely I am to invest.

I pass on those situations where the price is too high or my confidence level is too low.
I like the simplicity of the thought--the research idea on VIC.
HCI coming out of bankruptcy. The hard part is finding out what the numbers are. The hard part is the digging.

## Home manufacturer-NVR

Huge returns of capital (25\% pre-tax). Question: how close are these numbers to normalized earnings? The business model is relatively low risk. There is not much capex or capital at risk.

They are buying back their stock at very reasonable prices. Where is the option price--I don't mind as long as they (mgt.) aren't stealing. These guys have been good shepherds of investor's capital. This was $\$ 143$ when it was written up and it is now above $\$ 500$ per share.

It really is the big ideas, the numbers look great, then try to understand the business--what are normalized earnings, and will this get better or worse.

Even if there are only 8 million shares at $\$ 150$ per share. Barriers to entry: not having the connections and resources. There is scale to this business.

Greenblatt: my worries about the business and the stock are different at higher prices for the stock. I would be worried but not at this valuation. I will worry at $60 \%$ to $70 \%$ higher

1. Is this an oil company with limited wells--the life is 30 years. Do they have a plan to replenish the wells. A building plan
2. The valuation and risk that you are taking are very low at these prices. Here they have a great model.

At a conservative case, what are normalized earnings? Forget about recession type earnings. If a normalized environment, they will make very good returns to capital, especially to the price I am paying today. A good business with reasonable barriers.
I am still buying it at $6 \times$ EBIT.

Special Guest. CEO with Pipe (Greenblatt pretending to be a CEO being interviewed by the class on how to restructure or fix his company--a declining apparel company with a manufacturing business and a licensing business).

Solution: shut down the manufacturing business and just use the licensing business. Always separate out the two businesses in your analysis.

An investment analyst that I interviewed, so I asked the standard questions such as what returns they get on capex and all the usual types of questions.

This company will ratchet up sales, they have huge margins and everything else. At 14 x earnings and it will grow at $22 \%$ per year for the next few years. I have been in the business for 10 years, and those things get like a 20 multiple.

So I asked a simple question: when will the patent run-off? How can you put a 20 multiple on a stock that will grow at 22 percent for 3 years and then it will fall off a cliff. YOU CAN"T DO THAT. I got a 70 page write-up on this company. SO WHAT! Keep it simple stupid (KISS).

Did you do a DCF analysis for three years for what they will earn before the drug goes off patent, then what type of prospects do they have in the pipeline? Well they don't have anything great in the pipeline. Then put some low value on what they have in the pipeline. Be very conservative since you are saying that they don't have much in the pipeline or many drugs far along in the FDA approval process. This is an analyst who makes $\$ 1$ million a year and is a partner in his firm. I am trying to get very simple facts.

Know all the questions should you ask. These simple metrics matter. You may not be able to:

- Figure out normalized EBIT
- Normalized returns to capital
- What types of returns to the industry and what types of barrier are there?

Then pass on the idea.
These were stocks that had huge margins of safety and the facts checked out. They were cheap.

You had competitors who had less of a franchise than the example. So put a low multiple on it. You do your DCF and comparable analysis. Apart from DCF analysis--do a reality check with low assumptions such as low growth rate and high capital costs). Test out your thinking that your numbers are in line.

Hey, I am getting a $6.66 \%$ earnings stream with HCA. How do I feel about that--many of my choices are qualitative assessments. Is it a good business, can it grow with low risk--many qualitative assessment.

The holding period for most of these stocks is two to three years. Buy 1 or 2 stocks every 3 to 5 months

## END

## Greenblatt Class \#10

November 12, 2003

Joel Greenblatt: I will speak about options this afternoon.
If capex is greater than depreciation and amortization then this is growth capex.
Next week, a review session for the final, and I will tell you what is on the final (ANF).

## Medco Presentation by Students.

Break-out maintenance capex from growth capex. Is the Company earning adequate returns on each additional $\$ 1$ invested? Companies open first in the best locations, then move into secondary locations in the retail industry, for example. ROIC.

Medco:
o EBIT/Tangible Assets
o OPERATING FCF/EV
o EV/EBIT
o EV/EBITDA

With EBIT, the amortization is deducted from EBIT so in this case (a company making many acquisitions), EBITDA is a better metric.

The students estimated a $\$ 45$ price target for Medco---30\% above Medco's current price. $\$ 27$ is the downside case.

Risks: HMO’s will take this in-house. $\$ 150$ million capex/yr. 12 P/E multiple. EV $\$ 10.5$ Bil./ $\$ 850$ mil. EBIT or 12x EV?EBIT. Look at the risks. What are the risks?

EV/EBITDA - CAPEX Cash return on what you are laying out. 7\% FCF FCF/EV. Growth assumption is $8.5 \%$

Question: How much to weight your trade or how wide your margin of safety?
65 cents to $\$ 1$ in a year with catalyst. Level for certainty. Time horizon.
Risks: Competitive. Big customers. Cash pick up of $\$ 0.30$ per share from Amortization charge. You don’t have to amortize Goodwill anymore. Cash earnings greater than reported earnings. Add back amortization. EV/EBITDA a better measure than EV/EBIT (since D\&A expensed).

EV/EBITDA - maint. Capex to arrive at pre-tax owner earnings.
Look at how mgt is compensated. Are they aligned with shareholders?

- Mgt. Stock options.
- Mgt. Incentives.

Albertson \$19.75 - ABS second Student Presentation. \$11-\$13 per share valuation.

Albertson's is in a poor market condition. It doesn't dominate its market. A very capital intensive business with economies of scale. No. 4 in market share.

Not growing the business, but remodeling key stores. They own $41 \%$ of their real estate--it doesn't seem to be worth that much. They have a restructuring program. No FCF. A change in their capex spending.

Earnings quality is poor. $\$ 36$ million upwards by $2 \%$ and improved returns from restructuring. Earning power of $\$ 1.5$ billion. Normalized Capex? Are they overspending capex now? -Joel Greenblatt question. Their earnings are overstated--less than the cash earnings number. If you put a multiple on that earnings power, that increases your error if you are wrong. Be sure to adjust for "normalized capex"

Replacement value. Tangible equity and took out operating leases and added back brand value. Tangible book and added the cost of capital. A range of brand value--a portion of the Greenwald book. I (Joel Greenblatt find evaluating brand value is difficult to do). Even if they have a great deal on real estate-undervalued on the books, their rents may be subsidized due to an under-market rent. find it very difficult to do. You can't double count. Yes, real estate is undervalued on the books, but the earnings are overstated due to under market rents. Don't double count in your valuation.

Negative FCF. Even if generous margins and 3\% growth, you get negative CF. How much left do they have for dividends--add back dividends. $\$ 400$ billion in sales, limited CF, Wal-Mart about to come in. This is ugly. All numbers are deteriorating.

They are somewhat cheaper to their comps. Break-up valuation.
Joel Greenblatt: If I was an Investment banker for these guys. Is it worth more broken up? Some businesses are worth more in some markets. They are profitable in some markets and less in others. They might be a more profitable enterprise by being smaller and broken up. Perhaps they have a big amount of value in their real estate.

Labor cost is a big issue. Competitive landscape: Not No. 1 in local markets except in a few local areas. Competes against Wal-Mart and Club Warehouses.

Trading with Peers - no catalyst for short. But their business is weak.
6.2\% ROIC--6.2\% stinks. They own their own real estate.
\$30 billion in revenue. 10 basis points means a big change. Labor costs are key. Their labor is union. Local market share is key. But they are only 1 to 2 in only 6 of their 15 markets.

Post tax ROIC 1988 - 2004 is going down. Declining returns on assets, equity and capital.

## EVENTUALLY THE MARKET GETS IT RIGHT.

Neg. FCF less than 0 . Mgt. has been selling. Stake in Company vs. their salaries for mgt. is important to focus on for compensation.

Operating leases may need to be capitalized for comparison purposes. Liquidating inventory so net income artificially boosted. No pension plan listed-under funded. No expensing of options in the income statement. Net income artificially high. D\&A is $\$ 948 \mathrm{mil}$. No opening stores. Overspending on capex? Undercounting D\&A?

Their earnings should deduct more for D\&A.
Multiple on Earnings Power. Figure out normal capex is key. 1.5x capex greater than D\&A.
Balance sheet replacement value. Brand value - tangible book x cost of capital-intangible value. Net asset value is $\$ 4.70$. Per share value is $\$ 12.00$.

Understand R/E. Low rent (subsidized stores)--shows more profit-don't double count.
EBITDA: Earnings from Operations before:

- Interest
- Taxes
- Increase in WC
- Dividends
- Capex

Lower comps:
ABS EV/EBIT: 8 P/E comparables.
Lousy market conditions, worth less. Look at company in pieces. Some market profit others have poor profit. Break it out!.

So shift in capex. Remodeling vs. opening new stores. Divest Real Estate.
Look at parts. If there is a huge sales and low margin company it could be worth more at $1 / 2$ size. Look at management compensation for spin-offs and all investments.

Second Student Presentation

## Springhouse Capital Presentation--Brian

He focuses on small cap spin-offs. SWBD, which is in the space of Yahoo, super pages, RBOCs.

Cash screen came up with this one. EPREsence.com: EPRE. It owns $52 \%$ of switchboard 9.8 million shares $E P R E$ has cash separate from $S W B D$.

2001/2002. Cash play screen for solid business. Is the Internet for real?
Net cash. $\$ 50$ mil cash--below cash. This company was at a discount to cash because of fears that the companies would burn through their cash.

1 EPRE share owned 0.42 SWBD so $1 / 2$ share. EPRE was a back door to SWBD. Cash and Engin. Business. EIKI.com

SWBD 18 MM shares--\$57 mm mkt cap. Net cash of $\$ 2.80$ per share. 12/21/01 It had an $\$ 86 \mathrm{~mm}$ Nols. EPRE had big GM of $75 \%$. Slash and burn costs. $\$ 58$ million loss-losing more than revenues.

EBITDA - capex equals -\$4.3 MM.
EPRE burning cash. The service business sucks. Switchboard.
He let the company pass for two more quarters. On Aug. 02 the cash situation had stabilized.
Longer than expected transition. AOL sells directly so time is needed.
If revs gone for good, then stock will decline. No change in cash, so deterioration stabilized. He focuses on cash.

Revs 2001 is $\$ 2.7$ million.
Then SBWD delisted ----SBWDE $\$ 2.50-\$ 2.75$ with $\$ 3$ in cash so you had a free option on the business. 2 million shares at $\$ 1.40$ from $\$ 2.50$ due to delisting. Huge trading volumes. Why? Who is in the stock? Harvard, MFS and Harborvest. DFS (Index Fund) - selling to get rid of the stock due to delisting.
$E P R E$ had $\$ 47$ MM in cash $+\$ 15$ for $S W B D=\$ 62$ MM Per share value of $\$ 2.80$
While price of $E P R E$ is $\$ 1.20$. Upside to value is $133.7 \%$

Overloaded Sales staff cut, but sales were up. The stock went from $\$ 1.40$ to $\$ 4.00$. The core business is better. Consulting has negative value due to labor liabilities. \$70 MM EV over \$4.4 MM EBIT. 15\% grow and grow GM, no capex competition, alliance with portal acquisition candidate level of revenue for other players.
$17 \%$ of market who cares? Grow $2 x$ as fast. Contract runs out in a year. A big plus-sell to local papers. Value in traffic, advertising. Other people are selling services.

He bought during the delisting since there were uneconomic sellers (DFS-index funds who needed to exit SBWD). People dump for no economic reason. An opportunity

Impute cash burn. Deduct from cash. He works in the micro-cap world.

## Options

## A huge advantage if you have a strong opinion on a stock. Create your own risk/reward trade-off or leveraged situation.

1. Buying Intrinsic Value $\$ 3.60$ and 5 months in the life of the option. $\$ 3.60$ minus 6 cents dividend $=\$ 3.54$ paid for the call.
$\$ 4.30$ minus $\$ 3.54$ = $\$ 0.76$ premium above intrinsic value.
Buying time value and right not to lose.
\$0.76
\$0.60 =
\$0.16
Not loss of time value
Value of Put
$\$ 16$ cents $/ \$ 15$ stock price $=1.1 \%$ cost of $\$$.
Make \$ on opinion. Joel Greenblatt uses options further out in time--1 or 2 years. $\quad \$ 27 / \$ 18=45 \%$
$\$ 6.25$ for Jan 06 calls. Stock at $\$ 27.00$. $\$ 15$ call so option would be worth $\$ 12$
$\$ 15+\$ 6.25=\$ 21.25-\$ 27=\$ 5.75$ different risk/reward. Put out $\$ 6.25$ to gain $\$ 5.75$.
Jan. $06 \$ 12.50$ call buy

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\$ 17.50 \text { call sell } \quad \$ 20---------\$ 12.50=\$ 7.50-\$ 2.50=\$ 5.00 \text { greater } \$ 17.50
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today $\$ 8$ \$12.50 call for $\$ 4.80 \quad \$ 15$ for $\$ 2.50$
Pay $\$ 8.00$ get $\$ 4.80$ so pay net $\$ 3.20$ for spread. If $\$ 15.70$ or better get money back if stock $\$ 12.50$. $\$ 5.00$ get, so profit of $\$ 1.80$ so $55 \%$ return.
$\$ 35$ price target. Now $\$ 17$ for FL so over $\$ 100 \%$. Create a situation to earn $50 \%$. Pay spread - do it at $\$ 3.20$
Risk arb. If you know price and time then you have an edge.
Buy $\$ 87$. Buy 80 put. After tender $\$ 68$, pay $\$ 1$ for 80 put. Then $\$ 39.95$. $\$ 800$ million disparity in value. $\$ 4.00$ in 3 years and quality $16 x=\$ 64$ in 3 years. 30 calls @ $\$ 58=\$ 28$. Pay $\$ 13.10=113 \%$. $\$ 26.25$ less. $\$ 3.75$ for interest $14 \%$ or $6.25 \%$ paid.

Lend me @\$6.25. Non recourse lending.
Lend me $\$ 26$ for $\$ 6.25 \%$ interest by buying this call.
30 Call allows one to borrow money on a non recourse basis. Pay $\$ 6$ to make $\$ 10.6 \mathrm{x} .6=60 \%$ return.
Options to change risk reward. Focus on great risk/reward situation.

## Note: Capitalization vs. Expenses: Capitalized leases vs. owning stores--Retail Industry.

Lease vs. purchase.
Consider two firms in the same line of business. One buys the required assets and the other leases (rents) the same assets. Only the former has made a capital investment and, from the creditor perspective, owns the assets. The other firm only owns the lease rights.

In economic terms, however, the firms are using the same mix of capital and labor. In this sense the firms are identical, and measurement of their return on assets and the efficiency of operations should be made on a comparable basis, regardless of the differing form of ownership. The ownership costs should be similar, with total lease payments over the lease term approx. the acquisition and financing costs. The form of ownership of an asset can greatly affect financial statement presentation even through operationally the firms are essentially identical.

Firms that capitalize costs and depreciate them over time will show "smoother" patterns of reported income. Firms that expense costs as incurred will tend to have greater variance in reported income.
Firms that capitalize always shows higher cash from operations; the difference increases and does not reverse over the life of the asset.
The ratio of cash from operations/capital expenditures measures the degree to which internally generated funds of the firm finance the replacement of productive capacity and expansion. FREE CASH FLOW, the excess cash from operations, would be identical for both firms and would equal the CFO for the expensing firm, assuming that depreciation is also equal to the cost of replacing "used up" capacity that is equal to capital expenditures. (This equality also assumes that, as the firm is not growing, no investment in working capital is required).

Note that non-cancelable leases constitute (off-balance sheet debt).

Today: Robert Goldstein, my partner, will discuss an investment in Moody's and why we were willing to pay the highest multiple ever for a company--21 PE for Moody's. Rob gets to the point quickly.

Secondly, Joel Greenblatt will discuss Portfolio Management. How he thinks about it.

A lot of the good things we find are so good that we don't need to use financial models to figure it out. The value is clear. We find 40 to 50 cent dollars. It is not that we are not thoughtful about our investments, but it is just that when they are good, we don't need fancy models to figure them out.

Moody's was compared to Coke since it was priced at 21x forward earnings. Is Moody's as good a business as Coke. Buffett could pay a high price and still make a fortune doing so. Buffett bought Coke and then 12 years later, he made 10 times his original investment.

He bought in 1986. You should pay $\$ 5$ and 10 years later the stock was $\$ 58$. What is that compound rate of return--22\%.

Buffett paid 14x for Coke in 1986. 12 years later Buffett made 10 x his money. He paid $\$ 5.22$ in 1988-in June 2000 it was $\$ 58$.

Moody's is a credit rating agency since customers must use their service and their market is growing very rapidly. There is little pricing pressure. $17 \%$ operating earnings growth for 19 years. An incredible business with no margin deterioration. Moody's and D\&B were the two main competitors.

1 share of D\&B equals $\$ 27.75$ which would equal $1 / 2$ share of $\mathrm{D} \& \mathrm{~B}$ and 1 share of Moody's. This creates:
D\&B spinoff equals $\$ 71 / 2$ and 20 1/4 for Moody’s. Earning 95 cents per share per year.
6/30/88 Comparison: What Buffett paid for Coke. What Greenblatt paid for Moody's
$\$ 4.5$ to $\$ 5.5$
Prior 33 cents 15x 24x
Year 39 cents 13x 21x
The stock for Buffett went from $\$ 5$ to $\$ 58$ and Coke paid out $\$ 4.75$ in dividends. $6 \%---\$ 6$ dividend pay-out. $\$ 58+\$ 6=\$ 64 . \quad 23.7 \%$ CGR.

We thought Moody's is a great business but the price was high? They compared it to Coke.

BIG PICTURE: An Oligopoly.
Moody's had 40\% of the business
40\% to S\&P
10\% for Duff and Phelps.
And it doesn't cost customers much as a proportion of the value for them to get a credit rating.
Operating Income up 12\%. What focus here?

Buy back stock \& payout dividends with cash. ROC for Coke was $60 \%$.
$12 \%$ operating earnings in 12 years for Moody's

1. Historical financials-certain conclusion.
2. 2. Growth - Low double digit growth option set to tell you any less.

Competitive analysis.
**Always look at mgt. alignment in a spinoff.
Coke at 12\% for 10 years. Moody's doesn't need capital to grow. (FINSERV)!
Look at ROC. They could grow operating earnings at $12 \%$ annually. Two assumptions, they had been growing at $18 \%$, management told us that growth rate would slow. We took them at their word.

Student: Did you do any growth analysis for Moody's in its different markets? To us it didn't matter as long as they grew a lot.

Moody's doesn't have to reinvest, so how to evaluate.
Earn \$1, no extra capital. 25\%. Coke \$1 invested equals 25 cents. 80 cents to $\$ 1.25 \%$ more.
ROC pay $15 \%$ more for Moody's vs. what Buffett paid for Coke. 15x forward earnings to pay vs. 21 x forward earnings for what we paid for Moody's. How justified?

Buffett paid $\$ 7$ for Coke and 8 x plus dividends $=\$ 64$.
\$5 15x
\$7 20x Lower rate of return's
Did I leave anything out of my analysis? Always ask the question.
Joel Greenblatt: Usually shareholders are so happy that mgt. is doing a spinoff to unlock value, that they are often lenient with mgt. on compensation.

Moody does not need to invest capital in its business to grow. Why is that? They just need employees with minimal capital equipment. The strength of the business allows for that--captive customers who pay fees. How to quantify their excess capital: For every dollar they earn, Moody's invests nothing (\$0) to grow 12\%.

You are getting a $\$ 1$ from Moody's and only 80 cents from Coke, so you are earning $25 \%$ more from Moody's. Coke will have to reinvest $8 \%$ to $10 \%$ of their earnings to grow.

Difference in ROC, we are willing to pay $80 \%$ more than Buffett would pay for Coke. 13x 1.25 you get 15 times forward earnings, but how can you justify 21 times forward earnings? We are willing to take a lower return. If you pay 15 times earnings, then you pay $\$ 5$ or you pay 21 x earnings, you pay 7 dollars, you take a lower rate of return.

Interest rates were higher in 1988 than in 2000. 30 year Bonds were at $9 \%$, you pay 11 x earnings.
In 2000 the bonds were at $6 \%--50 \%$ less in interest rate cost than in 1988. At $6 \%$ of 16 and change or almost 50\% more.

To get a $20 \%$ compounded annual return for 8 years, then how much of a multiple to pay for Moody's? 13 x earnings but with a higher ROC, it was worth $25 \%$ more then $40 \%$ more for the lower interest rates so we could pay 21 x earnings. Earnings grow by $12 \%$ a year and the company uses all its earnings to repurchase stock. The company had no debt.

They could actually grow earnings about $17 \%$ a year. 2003, they have earnings of $\$ 1.49$ and a 21 PE multiple, you $\$ 37$ per share. $3.32 \%$ yield for a great business and growing revenue, so we thought the business was worth 30 times earnings for $\$ 1.75$ at the end of 2004 , so a price over $\$ 50$. It was difficult to lose money at $\$ 20$ which was our initial price paid for Moody's. We might be aggressive using high multiples here, but growth had been higher and the downside was limited. Our best conservative guess. Even if we screwed up some of the numbers, we wouldn't have lost much money. We took a shot.

In addition, we knew Buffett owned 15\% of Moody's at the time and you could still do this analysis. This was so obvious that this was a great business and you were paying the same price as Buffett.

A great exercise, we compared to Coke, and we thought Moody's was better. By looking backwards at Coke, Moody's was prospectively a much better business. Combined the stock was 21 times combined, but if the bad business was sold, then we were only paying 21 times.

## Value investing is not just buying low $\mathbf{P / E}$ multiples. In value investing, you are buying something at a discount to what you think it is worth.

You had to make a judgment about $\mathrm{D} \& \mathrm{~B}$ due to this special situation. The mgt was questionable. Some investors were afraid that mgt. was going to flush the Moody's profits down the toilet.

Joel Greenblatt: we sold it in the mid 30's and our cost was $\$ 17$ and change. We should have kept it. Usually if you are looking for stuff, you can find better stuff. You don't feel it except for the taxes paid. The easier money was the first year we held it. Compare the investment to your other alternatives are at the time. We were more comfortable in an alternative investment vs. being Buffett-like and holding on.

Now that I am older, patience would have been rewarded. I started out in the arbitrage business because that was where the money was made. Now I look three years out. But with Moody's the returns came very fast in the first year. How fast do you turn over your money? What are your alternatives. Net of taxes, we would have been better off holding on, but we were more comfortable moving on to other 50 cent dollars.

There might be a flaw in our analysis. Part of Coke's price rise was due to a drop in interest rates. Factoring Interest rates--how does this effect Moody share price and our analysis?

T-Bonds : up in Value. $40 \%$ premium for 15 x . so pay $21 \mathrm{x}-22 \mathrm{x}$. Tighten up your expectation. Earnings up $12 \%$. All earnings to repurchase stock.

Stock at 20x, then share buy backs with the excess capital. So earnings growth would go from $12 \%$ to $17 \%$ with declining share base. In 2003, \$1.49 x $21=\$ 37$ per share.

Real value 30 x earnings. Earnings yield $3.33 \%$ for a great business. $30 \times 1.75=\$ 50.25$
Hard to lose money at $\$ 20$ by owning a great business. There are not many opportunities like this. Buffett owned $15 \%$ of Moody's at one time. It was obviously a great business.

Moody's business is better than Coke because it needs no capital to grow.
Look backwards at Coke - Moody's would do better going forward. Value investment - not just buying low. P/E and book value.

Buy at discount to what you think its worth is--Intrinsic value. Investors, when they looked at Moody's were worried that Mgt. was questionable at Moody's?

Bot FL and it is now at $\$ 17$ but we think it can be worth $\$ 35$. Compare alternatives.
The older I get, the more patience is rewarded. My time horizon has expanded. That is life, sell winners later. He focuses on a certain niche.

So much analysis is wasted time. The hard part is the knowledge of where to look and the patience to find the right opportunity.

Host/Marriott example: the hotels were just being finished-so earnings will start going up.

## Portfolio Mgt.

1. Concentrate - 1-20 positions. 20 things - which ones you like most. Live and learn. Buffett paid high multiple for a Coke, so Joel learned to find opportunity in Moody's. Look for the fat pitch, wait for what you are comfortable with. Out of 20 situations, you usually find 1 or 2 that you are comfortable with. Concentrate on your best positions.
2. Volatility - Washington Post. EV was $\$ 100$ million and subsequently it went to $\$ 50$ million in 197374 market. Any analyst at the time or private buyer would pay $\$ 400$ million for the Post. But near term uncertainty was bad.

Pick 1-3 stocks or 1-7 stocks or 1-10 a diversification portfolio of businesses. You would want to own 3-10 businesses. You would rather own 3 to 5 good businesses in a town rather than 50 businesses. 3-8 business, you would feel well-diversified. I would have an opinion of what those cash flows are worth.

Stop analyzing stocks as data \& statistics and start analyzing businesses. In 2 or 3 years the market gets it right--I guarantee it (Joel Greenblatt). The catch is your accurate analysis. You can combine you valuation skills with picking your spots. "I know this is worth between $\$ 20$ to $\$ 30$, but I'll pay only $\$ 12$.

Move your time horizon out 2-3-4 years and think of stocks as businesses.
Look for a catalyst. It can happen over the next year or two. They will have positive earnings growth, or they can fix that division. There are other special opportunities beside just spin-offs. We own 6 to 8 securities held 6-18 months.

Risk = volatility is strange.
$100 \%$ stock portfolio would have $18 \%$ std. Dev. Then 10 years it moves to $4 \%$. The efficient frontier is worthless. If your horizon is 10 years, then why lower return to lower std. devs. It doesn't make sense to lower returns.

If you are good at picking stocks, then as time increases, your returns go up while your volatility goes down. If you view these stocks as businesses, then don't be frightened by fluctuating businesses. Does it make sense focus on statistical analysis vs. evaluating the quality and ongoing condition of the business.

Note: in the Intelligent Investor by Ben Graham: Like it or not: market prices fluctuate, but that does not equate with risk.

You are taking a risk on your valuation work, or future deterioration of that business. If you doubt that it is worth a dollar and now it is worth 50 cents, then you sell.

Last fall was a great time to be buying stocks. Stocks were being given away. Right now there aren't a great amount of opportunities.

What would you say to a money manager now? Be patient. Buy what you think is very cheap and/or sit on your money. We are bottoms up investors. If we can't find things cheap enough, we wait—probably 4 to 6 months. Don't press. You will have plenty to buy but usually in clumps.

1 to 4 years time horizon out.

1. discount to value
2. some catalyst
3. $\$ 60$ to $\$ 70$ million spinouts a year. But I might only buy 1 or 2 . I own 6 to 8 securities.

Risk does NOT equal volatility.
$18 \%$ Std. Dev. Per year. 4\% Std. Dev in 10 years.
Why lower returns for less volatility?

| Std. Dev. 1 year | $3-5$ | 10 yrs. |  |
| :--- | :---: | :---: | :---: |
| Pzena | 20.7 | 5.6 | 4.5 |
| Russell | 16.9 | 10.1 | 6.1 |

If you are good at valuing stocks, then your volatility will go down over time.
Act as if you own the business.
Risk that valuation is wrong. Or there is a large deterioration in business.
Patience.

Wait for 3 to 6 months for opportunities to arrive. Don't press when you can't find opportunities . The opportunities will come in clumps.

Trying to predict the market: The average opinion of the average opinion in trying to predict the market. Pointless!

In 2000, Joel thought that the 1500 to 2000 S\&P market too high. Internet boom to bust. But tons of opportunities - good companies are steady growers at cheap prices. 40 cent to 50 cent dollars.

Down 5\% in 1999 then up $100 \%$ in 2000.
Why do many portfolio managers fail? Do it a little different.

Mistakes:

- They lack a circle of competence; too many stocks; less focus
- Indexing and momentum
- Sexy businesses vs. unattractive
- NO WORK! In Joel's mind the main issue.

Emotions: More painful to lose than win.
The less you know, the worse your emotions. The more stocks you have, the less knowledge for each holding.
Underperformance/lose. Liquidity. Benefits to concentration: it is easier to underperform. A loser's game of 50 to 100 names.

To really out-perform: focus.
Work to pick spots. Investors not always rational.

## Diversification

```
2 stocks reduce risk by 46%
4 72%
8 81%
```

10 stocks in a portfolio then risk reduced $85 \%$.
$\$ 1000$ then $10 \%$ in each position--lose $1 / 2$ so now $5 \%$ loss of the portfolio. After tax assuming other profits then $60 \% \times 5 \%=3 \%$ after-tax loss.

So out of $\$ 1000$ you have a $\$ 30$ loss leaving $\$ 970$ in your portfolio.
Joel Greenblatt has 6 to 9 names in his portfolio. Some leveraged calls.
With a leveraged security, his weighting would go down from $10 \%$ to $5 \%-5$ to 1 or 0 . He would take a $1 / 2$ position limit.

If he really likes an idea then $10 \%$ to $20 \%$ of portfolio. The portfolio is built from the bottom up.
Hedge with market index.
He made a big investment in a S\&L with a complicated capital structure but a clear 50 cents dollar.
WAIT for opportunities. Take worse case situation. Larger position with higher probability events.
Wells Fargo: \$0 or \$150-\$200. Or \$50 investment goes to 0 or $\$ 100$. Use Calls to make a risk/reward bet of $\$ 15$ for $\$ 110$ payoff or 0. Better risk reward.

Usually, he will not have more than $3.5 \%$ bet in Leaps.
Prof. Greenblatt then hands out to each student--their 20 hole punch-card. If you could adhere to this, you would become rich.

December 3 is the final--2 weeks from today. This coming Tuesday at 2 PM will be a review class.
A question on risk arbitrage. Read financials, do a comparative analysis.

## Key to outperform:

## Concentrate and focus on your best ideas within your circle of competence.

Focus on undervalued companies, not the market. Back in 2000, Joel was worried about the Internet bubble and what would happen to the market when it burst, yet he was finding 40 cent and 50 cent dollars. What should he have done? Bought undervalued stock and ignore the market.

Find cheap companies relative to what they are worth.

## What mistakes do Institutional Investors make?

Stay within your circle of competence. If you own a lot of stocks, it is very difficult to stay within your circle of competence.

No work-that is a big one. Many lack the time or inclination to do independent, proper valuation.
Personal needs to remove money out of the market can mess up your results.
Pick your spots and stay around those spots.
People hate losing money twice as much as when they make money. It is painful to lose.
I am guaranteeing you that the market will get it right if you hang in there long enough. The catch is your valuation work.

If you own too many stocks, you will dissipate your efforts and knowledge. The less your knowledge, the more emotional you will be. The further you get away from what the companies are worth, the more emotional you will be. Risks of concentration, you are more likely to underperform.

Lack of liquidity is a risk.
A loser's game is owning too many stocks-take your out performance way down. FOCUS on the best ideas. The more at bats you have the less chance you have of being better than a 400 hitter.

Modern Portfolio Theory (MPT) will teach you how to do average. Investors do not process information correctly.

Take the opportunities as they come. He will take the worse case scenario such as lose $1 / 2$ to entire investments. He takes large position with high probability events.

## END

## Greenblatt Class \#12 (Review)

November 24, 2002
Saddlerock Partners - Diane Greenblatt 212-319-4100 Stock: Salton, SCF
Ranaud Ajdler 212-374-1351. Belgium Classmate who audited Greenblatt's class.
Bankruptcy Investing by Ben Branch/Hugh Ray suggested by Linda Chen.
Review Class Nov. 24, 2003
I hope you read my book, You Can Be A Stock Market Genius and the Haugen Book.
Make assumptions and tell me why you make those assumptions.
ROC is important. Balance sheet interests that we spoke about (Inventories growing faster than sales).
EBIT to EBITDA. Use EBITDA for comparative analysis. For absolute analysis you have to deduct for Capex.

Shorthand which is OK to use is EBIT or EBITDA - Maint. Capex. The difference is between EBIT and D\&A.EBIT and amortization. When there is a disparity between capex and depreciation, you have to take that into account. Was capex for maint. or growth?

Was the Capex for maint. Or maint. And growth? You use P/E when you compare unleveraged companies. Remember the first example in the class. When you have cash and no leverage then it is all the better to use EV rather than P/Es. Figure out normalized EBIT.

We are using EV/EBIT as a shorthand for what is the return for the capital you have invested. Some times the trailing is a good proxy and other times it isn't.

EV is the amount you pay for the company. EBIT is the pre-tax earnings.
How good a business it is. ROA and ROE and Return on tangible assets. Return on Capital. WC + Fixed Assets for tangible assets.
$6 \%$ T-Bond Rate. Company has a return of $10 \%$ pretax. I either have to borrow the money or have an alternative use for the money. $10 \%$ pretax return and growth for $20 \%$ a year--that might be good.

Alternative investment: risk and set Ir with a Junk Bond.
Retail: cost of opening stores: EBIT/Net Working Capital and Fixed Assets.

EBIT/Net WC $+\mathrm{FA}=\$ 20 / \$ 100=20 \%$. The marginal return on each store will be at least $20 \%$. If it is $10 \%$ to build the next store, then there are alternatives like Junk Bonds.
What will be my normalized returns?
Buy a pile of assets, then reinvest in assets. What are they earning on them?
David Buster's: \$4 million each store, around for a few years. \$180,000 EBIT $=4.5 \%$ pre-tax. Lousy return. The investment is $\$ 4$ million, which is the fixed assets and Working Capital for each store--that is a capital destroyer: $4.5 \%$ is less than required return of $10 \%$. There is risk involved.

I would like to see at least $20 \%$ pre-tax in a business. But after tax, I am left with $12 \%$ return depending upon tax shields, having debt, etc.

Different retail chains have other returns.

EV (mkt. Value + debt - net cash) is the market price you paid. EBIT is what you get on those assets. EBIT is the return on the business. EV/EBIT at 4.5\% is a mix of the two. The $4.5 \%$ depends on the return on assets AND the price paid.

A value trap: A company looks cheap, but it earns lousy returns on capital.
I don' like the CAPM method because it is based on a number without logic. What I do: I use the T-Bond rate at $6 \%$. Or buy a business at $16 \times \mathrm{P} / \mathrm{E}$. I feel very secure about their franchise.

What are my other investment opportunities or 6 months from now relative to my experience.
If I could buy something at 4 times EBIT then it is not clear. They have two businesses: 1 earns $\$ 6$ and the other loses $\$ 4.00$. If they shut the loser down, then they can earn $\$ 4$.
What multiple it is trading at?
Break-up analysis. Footlocker took a little work. We spoke with management. $\$ 1.00$ trading at $\$ 10$ with no leverage and they had a build-out. No growth, so it might be priced OK. Mgt. tried the Super store concept, but it failed. The sneaker mkt got overbuilt. A lot of stores closed down. Too much supply. I felt good about the store base. They had opened a ton of Superconcepts and they were losing money. Each time a lease came up, they closed the stores.

They were losing 60 cents after tax on those stores. Each year, they would earn 20 cents per share more each year-overlooked by many analysts. So if they did nothing and stayed flat, they could earn an additional 60 cents. Less maint. Capex (MCX) and more CF. So from $\$ 1.00$ to $\$ 1.60$. No leverage and do nothing, they can earn $\$ 1.60$ so a $\$ 17$ to $\$ 27$ stock at a $10 / 11 \mathrm{P} / \mathrm{E}$ to $16 \mathrm{P} / \mathrm{E}$. Now I have a number over $\$ 2.00$ so, 16 multiple could be $\$ 32$. All those things doable by the company without predicting the future of sneaker sales.

I don't have to look for hard ones. HCA: What is normalized EBIT? In three years would be $\$ 4$ per share. What type of multiple that deserved. Given the nature of the business, the demographics, and the protection of medicare. They go in cycles. Take a normalized number. I will do better on this $\$ 4$ growing at $5 \%-6 \%$, so a $16 \mathrm{P} / \mathrm{E}$ was reasonable so $\$ 64.00$ and the stock was at $\$ 36$ or more than double. I know institutions do not have many alternatives for their money, so the multiple may even be low. Or I could be wrong and the multiple should be 14. I could be wrong on the business and the multiplier and still not lose money.

I do think of my cost of borrowing not my cost of equity. $4.5 \%$ is a capital destroyer. $6 \%$ and growing is OK.
This business will earn $10.5 \%$ and the borrowing cost is $9 \%$ with half of that not fixed. You have a complex business, and you get a thin spread. Not worth it. His example when he ran that company.

What is this business going to earn? If I have to borrow to buy this business and the spread is only $1.5 \%$ then pass. It is that simple.

No one who looks at it that way would take that bet.

## OPTIONS:

Stock is at $\$ 41$ with a 35 call and a 35 put trading at $\$ 1.25$ and cost of carry is $6 \%$ and 4 months to expiration and no dividend. Where does the call trade?
$\$ 41$ stock price $-35 C=\$ 6.00$ intrinsic value plus $\$ 1.25$ Put value $+2 \%$ ( $6 \%$ for $4 / 12$ of year) on $\$ 35=70$ cents for a total of $\$ 6+\$ 1.25+\$ 0.70=\$ 7.95$

## The Intrinsic Value, the Protection Money (or right not to lose money) and the time value of money.

The value of the call is the Right not to put up money and the right not to lose money and intrinsic value.
You can create interesting risk/rewards with this. Don' think of this as volatility, etc.
Sometimes you may have Binary events where the stock could go to $\$ 20$ or $\$ 70$. Leverage and time constraints then go to use Leaps (LT Options)--borrow money for long periods of time. Buy Call but you buy the Put as well. The cost of money could be as low as what it costs Goldman Sachs to borrow money by buying that call. Review his Chapter in his book. Even if you include the cost of this put, part of my borrowing cost, $\mathrm{i} / \mathrm{o}$ paying $2 \%$ you are paying $7 \%-8 \%$.

Call: Intrinsic value, cost of put and cost of money.
LEAPS are like non-recourse loans.
How to assess management? Look at the numbers. Listen to them, to their game plan. Do they make sense? If you can't assess the situation, then pass on it. How does management put incremental to work. Expertise. Money managers lose on discipline. Note Kodak and their plan to spend money is very risky. Instead of taking their cash cow and paying back to shareholders. Milk the business before spending that $\$ 35$ per share and losing part of it. My assessment is that their plan is riskier. I have less of a sense of how well they will compete in the digital world. You pay your money and you take your chances. Mgt's plan may be right, I just wouldn't bet on it.

I don't know where sneaker trends are going--but that was not important for Footlocker. The market is not changing overnight.

If you are going from $50 \%$ returns on capital to $40 \%$ that is good, but if it is 0 , that is bad. Use common sense.
Pick something that you can assess and come up with a valuation based on your expertise, then pay 1/2 that. People buy lots of things and get out of their circle of competence.

The bottom line is that you guys are Columbia MBAs and are all smart. Wall Street is smart. But not many do well. Small, complicated portfolio. You can't measure risk by volatility. Special Situation Investing is value investing with a catalyst.

I didn't give you complicated formulas to beat Wall Street.

## I am giving you a way to look at the world.

A way you look at the world. Everyone reads the same things. He focuses on Special Situations, which are value investments with a catalyst. Success is not IQ points or a 40 page report. It does or can take a lot of work to get to normalized earnings.

## MISTAKE:

P-3 Media. I bought it out of a spin-off from a merger. P-3 media in 2000 for $\$ 2.00$ and raised an IPO at $\$ 6.00$. It was running trade shows at Comdex. Mismanged. They rent space for $\$ 2 / \mathrm{Sq} \mathrm{ft}$. and sell for $\$ 62$ per sq. ft. Huge $\$ 2$ to $\$ 62$ spread. A negative working capital business. Pay ahead of time, expenses low. Little capital for the business. In 2000 the had 1 million sq. ft . But operating leverage works both ways. As business started to decline, they lost money. Other trade shows took parts of the audience. Sq. ft. were lost.

The stock went from $\$ 2$ to $\$ 12$. I decided to wait out the storm. I owned too much of an illiquid stock and I was not aggressive enough to get out when I was clearly wrong, when the stock traded at $\$ 6.00$.

Exam on Wed. Dec 3, 2003 about 2 hours

## END


[^0]:    "If you took our top fifteen decisions out, we'd have a pretty average record. It wasn't hyperactivity, but a hell of a lot of patience. You stuck to your principles and when opportunities came along, you pounced on them with vigor."

