# STRATEGIES USED BY WARREN BUFFET, CHARLES MUNGER, AND SHELBY DAVIS TO OUTPERFORM THE MARKET 

Presented to the Michigan Tech Applied Portfolio Management Program ${ }^{1}$ Houghton, Michigan

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Stocks have been one of the worst performing asset classes in the last decade, underperforming gold, commodities,
 crude oil, bonds, and treasuries. In the decade ending January 1, 2010, the average stock as measured by the Standard \& Poor's 500 Index actually declined $0.2 \%$ per year. The accompanying chart, courtesy Joshua Brown and Bloomberg, illustrates the return of stocks versus other asset classes.

And the Wall Street Journal pointed out last year that equities are in the "lost decade" tarnishing their image with investors. The S\&P 500 index is composed of 500 of the largest and most successful companies that operate on a global basis - and the index is used by many active portfolio managers as a performance benchmark. So it is a good proxy for the overall market.

Long term investors, hoping to harvest returns from the market, have had slim pickings over an extended period. Many have fled the stock market. Further, there is a growing consensus among investment advisors and professionals that 'active' portfolio managers - that is managers who pick and choose stocks for their portfolio - tend to under-perform the major market averages. There is some statistical validation of this claim. ${ }^{2}$

One measurement of a money manager's excess returns is referred to as 'alpha'. It is defined as the added returns an investor receives over and above the returns you would expect from the market. Bill Donoghue, Editor of The Proactive Fund Investor, recently year reviewed 3,226 actively managed mutual funds and found the average alpha was a negative 0.74.

Donoghue's results indicate that active portfolio managers are delivering returns below what you would expect from the market. In fact, investors overall were penalized from a return standpoint by investing in actively managed funds. This finding was not unique. Some active managers have pushed the legal boundaries in an attempt to obtain information or an advantage in generating excess returns.

Studies like Donoghue's explain why many investment advisors recommend individuals consider low cost exchange traded funds (ETF's) that track the major market averages. Statistically, the advisors argue this low cost 'passive' method of investing generally outperforms many strategies that rely on actively managed portfolios.

Other recent studies confirm that active portfolio managers have a very difficult time beating the major market averages - and it appears that it is becoming more difficult for professional money managers to generate alpha (excess returns) over time. Some claim this is because the markets are becoming more global and more efficient. Others claim transactional, marketing, regulatory, and management costs overwhelm any excess returns an active manager can generate.

Ms. Anderson \& The Othmers: A Warren Buffett Case Study. In September, 2007, the George School, a preparatory school in Bucks County, Pennsylvania, received a $\$ 128$ million donation from Barbara Anderson, an alumna of the high school. The administrators of the private, 500-student institution set on a 240-acre campus were stunned.


[^0]Ms. Anderson, who now lives in Fresno, California, is a retired kindergarten teacher. Her parents were well educated but not considered wealthy. At 75, and diagnosed with Alzheimer's, she wanted to make the gift to the school for the education she received and the work ethic the school encouraged.

Separately, living quiet, unpretentious lives Dr. and Ms. Othmer - he was a professor of chemical engineering at Polytechnic University in Brooklyn and she was a former grade school teacher - died in the late 1990's. They had no children. When the Othmers died, friends were shocked to learn that their estate was worth close to $\$ 800$ million. What is the connection between the Othmers and Ms. Anderson? How did these teachers acquire so much wealth?

In Ms. Anderson's case, her father happened to be a finance professor at Columbia University. He became well known in academic circles for the textbook he co-authored with another professor entitled "Security Analysis". His name was David L. Dodd. The co-author was a professor named Benjamin Graham. The textbook sales generated a good profit, but did not make either wealthy.

A prospective student who had been rejected from Harvard's MBA program wrote to Dr. Dodd in 1950: "I thought you were dead, but now that I know that you're alive, l'd like to come study with you." That student was admitted to Columbia, eventually graduating.

Dodd invested for himself and his daughter in a private investment partnership managed by his young student. The student's name was Warren Buffett. The investors were eventually given the option of liquidating their investment when the partnership dissolved - or taking Berkshire Hathaway shares priced in the open market under \$50 per share. Dodd elected to take the shares.

The Othmers, like many long term investors, invested their money into small, well managed, undervalued companies. Like the Dodds, the Othmers had an additional benefit: in the early 1960's they each invested $\$ 25,000$ in a private investment partnership run by Warren Buffett.

The Othmers received thousands of shares of Berkshire Hathaway at $\$ 46$ a share (chart at right) when Mr. Buffet dissolved his partnership. Today those shares trade around $\$ 125,000$ a share. Mrs. Othmer's shares were worth $\$ 578$ million on her death; her husband's, sold on his death when the price was lower, were worth $\$ 210$ million.

Mr. Buffett managed a private investment partnership from 1957 until roughly 1969. When he shut down the partnerships investors could either 'cash out' or roll over their investment into Berkshire Hathaway. Those who cashed out did very well. Over a 13 year period Buffett outperformed the market by an average $21.8 \%$ before his costs, fees, and
 expenses. Those that rolled their investment over to Berkshire Hathaway did incredibly well. ${ }^{3}$

## General Lessons for Investors

- An investment manager that can outperform the market has an incredible impact on total long term returns
- Strategies that have a high probability of outperforming the market are extremely valuable to investors with a long term time horizon
- Time is one of an investor's most valuable assets
- Even small differences in annual returns can have enormous longer term impact on total returns due to compounding ${ }^{4}$
- You don't have to be a Harvard MBA to be a successful money manager

[^1]Buffett's Rules for Investment Success - A summary of the investment strategies utilized by Warren Buffett were published by a law professor at Cardozo University. Entitled "The Essays of Warren Buffett: Lessons for Corporate America" it is a compilation of Buffett's annual reports and other communications. Some of Buffett's investment strategies are as follows:

1. Buy a Good "Business Boat" - Buffett points out the importance of choosing a company situated in a growing and profitable industry. He identifies his largest investment mistake - buying the small company his firm was named after (Berkshire Hathaway) - not because the company was flawed, but because the industry it was in (textiles) was so unattractive. The company was cheap by most valuation metrics, but there was a good reason.

The textile industry provided very meager returns for Berkshire. No matter how well managed the company was it would always have subnormal returns. The textile industry was a commodity business, competitors had facilities located overseas that were low cost producers, and substantial excess capacity existed worldwide.

Buffett notes "a good managerial record (measured by economic returns) is far more a function of what business boat you get into than it is of how effectively you row . . Should you find yourself in a chronicallyleaking boat, energy devoted to changing vessels is likely to be more productive than energy devoted to patching leaks."
2. Compound Returns by Deferring Taxes - One reason that investors in Berkshire stock did so well was that their investment was compounded and their capital gains taxes were never realized. "Tax-paying investors will realize a far, far greater sum from a single investment that compounds internally at a given rate than from a succession of investments compounding at the same rate. But I suspect many Berkshire shareholders figured that out long ago" according to Buffett.
3. Concentration of Investments - Professor Cunningham notes that "contrary to modern finance theory, Buffett's investment knitting does not prescribe diversification. It may even call for concentration . . . a strategy of financial and mental concentration may reduce risk by raising both the intensity of an investor's thinking about a business and the comfort level he must have with its fundamental characteristics before buying it." Other articles have noted the tendency of Buffett to concentrate his investments, and claim that this is part of his success. If nothing else, concentration allows an investor to follow a company much more closely - which allows them to better judge when a stock is undervalued.
4. Good Business Judgment, Misvaluation, \& Small Companies - Buffett subscribes to the theory that the market is not always efficient, and that at certain times companies will be grossly undervalued or overvalued. The market allows an astute investor to buy positions in companies well below intrinsic values. In the long term, such value will be recognized.
"An investor will succeed by coupling good business judgment with an ability to insulate his thoughts and behavior from the super-contagious emotions that swirl about the marketplace... The speed at which a business's success is recognized is not that important as long as the company's intrinsic value is increasing at a satisfactory rate - in fact, delayed recognition can be an advantage: It may give us the chance to buy more of a good thing at a bargain price."

Few people realize that during the period Buffett managed his partnership he focused on small, illiquid, microcap firms. Such companies were more likely to be mis-valued, and more likely to contribute to the growth of shareholder value.
5. Small Asset Base - Due to the size of the funds Berkshire now manages Buffett recognizes that the return he will obtain from his investments will be lower than when he was managing much smaller sums. Using analogies to the growth of bacteria, he notes that growth from a small base can continue at a much faster pace for much longer than from a large base. The larger sums now being managed limit the size of companies Berkshire can invest in - using a concentrated investment approach meaningful investments cannot be made in small and micro-cap companies.

Charles Munger - Vice-Chair of Berkshire Hathaway and long time Buffett partner in the investment world, was also an incredibly talented investor. An attorney by trade Munger began investing in real estate then founded a small investment partnership, Wheeler, Munger \& Company. Mr. Munger actively managed this investment partnership from 1962 to 1975, then played a key role in building Berkshire Hathaway, and provided a significant influence on Buffett's investment theory and strategy. Over a 14 year period Munger outperformed the market by $17.9 \%$ per year before his costs, fees, and expenses.

Portfolio volatility does not bother Munger according to Janet Lowe, author of a book on him entitled "Damn Right!" She notes that Munger tends to focus on a few good investment ideas, concentrates his portfolio in these ideas, and lets the long term growth of these firms compound his returns.

Munger's Rules for Investment Success - Several themes explain Munger's incredible success generating excess returns and accumulating wealth:

1. Live Below Your Means - Munger notes that it is very important to consistently underspend your income, especially when starting a career, investing the excess funds wisely. The most difficult part of building wealth is "accumulating the first $\$ 100,000$ from a standing start, with no seed money" according to Munger. Making the first million is the next big hurdle.
2. Understand Your Risk Tolerance - Every investor has to know the level of risk that they can comfortably assume. Since losses are inevitable - and the book discusses numerous mistakes made by both Munger and Buffett - an investor must adopt a strategy that fits their risk profile. Since recent behavioral finance studies indicate that losses are three times as painful as gains for most investors, many investors may want to adopt a relatively conservative strategy.
3. Research Opportunities - Investors must be able to process a massive amount of information effectively, and must learn to evaluate the risks and rewards of potential investments. Business magazines are a great resource for evaluating trends, and Munger notes that "I don't think you can get to be a really good investor . . without doing a massive amount of reading."
4. Invest for the Long Term in Small Companies - Volatility has not been a major concern of Munger, provided the long term odds of success are in his favor. In fact, volatility can allow an investor to accumulate positions in a viable enterprise at prices below intrinsic value. He tended to focus on very small companies that were not well known or followed by Wall Street and tended to be illiquid. A long term focus is essential when ignoring the volatility of markets and individual stocks, and can provide impressive gains that tend to compound over time.

Both Munger and Buffett ignore beta - the measure professional investors use to gage volatility and hence "risk" - preferring to focus instead on the risk/reward relationship of the business over the longer term. "Volatility over time will take care of itself" according to Munger, provided favorable odds exist that the business will grow.
5. Mutual Funds Are No Substitute - Americans are oversold on the benefit they receive from money managers, especially mutual fund managers, and "that bothers Munger enormously." Transaction costs, taxes, and fees can significantly reduce total returns. Munger advocates buying index funds, or alternatively buying high quality stocks that are not overvalued and holding for the long term.
6. Patience, Coupled With Decisive Action - Excellent investment opportunities are not common. Investors should continually search and evaluate opportunities. Utmost patience is required, until one is found that has extremely favorable odds of success. "People underrate the importance of a few simple big ideas" according to Munger. Extreme decisiveness, once the commitment is made, dramatically improves financial results over a lifetime.
7. Tax Planning - Taxes and tax planning play a major role in wealth accumulation. As a lawyer drawing an income Munger was subject to relatively high income tax rates, significantly above what he paid on capital gains, which reduces the ability to build wealth. The recognition of any capital gains on investments many times can be delayed or offset by investment losses, allowing the investment to compound at an accelerated rate.
8. Love the Process - Because investors must initially be willing to live below their means, have the skills to conduct a massive amount of due diligence, exhibit patience, read voraciously, manage risk effectively, and make decisive actions when the odds are in their favor, an investor must love the evaluation and investment process since it is not without a massive amount of work.
9. Pay a Reasonable Price - While value is important, investors should buy good businesses that are in sectors that exhibit favorable business characteristics. Management can only do so much with a company in a declining industry. Good businesses will grow in value over time.
10. Choose Good Partners - Every investor relies on the advice of others in making investment decisions whether those are investment advisors, brokers, newsletters, or business partners. Munger was fortunate to have selected some of the best partners available to assist in evaluating investment issues. Successful investors will have top quality investment partners.

Shelby Davis' Rules for Investment Success - Some have said that Shelby Davis was one of the best investors the public has never heard of-unlike the well known Warren Buffett and Charlie Munger of Berkshire Hathaway fame. Davis grew an investment of \$50,000 in 1947 to roughly $\$ 900$ million on his death in 1994.

Like Buffett he favored stocks of small companies in the insurance industry. Davis had little money management experience before starting his portfolio and active management activities (actually, stocks were considered a very risky asset class in the 1940's, not suitable for most individuals or institutions).

A book on his life and investment philosophy entitled "The Davis Dynasty" was published a few years ago. Davis acknowledged he was lucky to start his investment activity when the market was at the start of a long bull run, making it easier to perform well. The factors that Davis used to generate excess returns included the following:

1. Small, Illiquid, Unfollowed Companies. Like Buffett and Munger, Davis focused on very small companies due to the mis-valuations and inefficiencies present in that sector of the market. He also concentrated his portfolio on a very small subset of firms he considered excellent businesses (around 30 companies). For the most part these firms had little analyst or institutional coverage. Davis was one of the few that followed many of the companies in his portfolio.
2. Long Term Focus, Research. Davis held the stocks for the longer term and benefited as the firms grew in size and profitability. He also invested in a sector he knew well (the insurance sector) - a sector that generally was not in favor. He conducted extensive due diligence on the firms he bought, and was also very thrifty keeping his investment related expenses at a minimum. Davis also lived well below his means and was know for his frugal nature. These strategies also served Warren Buffett and Charlie Munger well.
3. Volatility \& Investment Returns. An interesting fact about the Davis portfolio is that in the bear market of 1973 to 1975 his $\$ 50$ million portfolio shrunk to $\$ 20$ million—a loss of roughly $60 \%$. But after 1975 the $\$ 20$ million in his portfolio grew very quickly-the stocks of small firms performed very well coming out of the economic decline, as has generally been the case historically. Stock prices of larger firms recovered after 1975, but not to the extent of the small, illiquid firms.

Davis bought very aggressively as firms became grossly undervalued in 1975 and the economy began to recover from the steep recession. He noted that "a down market lets you buy more share in great companies at favorable prices. If you know what you're doing you'll make most of your money from these periods. You just won't realize it until much later." Over the next 19 years the $\$ 20$ million portfolio grew to $\$ 900$ million.

Volatility \& Lessons of the 1973-1974 Recession. Like Davis, Munger's portfolio was down in the 1973-75 recession - by roughly $60 \%$ from the portfolio highs seen in 1972. Like the Davis portfolio the Munger portfolio recovered after the recession quite well as the small company, inefficient and illiquid sector of the market, outperformed as the economy began to grow - and his portfolio gained $73 \%$ in 1975.

By the time of the 1973-75 recession Buffett had liquidated his investment partnership. His investors had the option of rolling their money into the stock of Berkshire Hathaway-but even the stock of Berkshire Hathaway fell by 50\% during the downturn (keep in mind the company was a microcap at the time).

Note several things about the Davis, Buffett, and Munger's experience during the 1973-1975 downturn. First, no matter how good the business prospects of companies in the portfolios, or the quality of management at Berkshire Hathaway, stock prices were depressed with the general market. Like the recent bear market, statistically all the portfolios and stock prices of public companies correlated closely with the general market trend-which was down.

All of their portfolios (or in Buffett's case the stock price of Berkshire Hathaway) were very volatile. All focused on investing in small companies that were illiquid but growing. All the managers ran a concentrated portfolio, with a few stocks they knew well (Buffett of course by this time concentrated all the assets into one company, Berkshire Hathaway, which could buy assets or stocks of other firms).

The portfolios, and Berkshire stock price, declined in value by a substantial amount in the 1973-75 bear market-over $50 \%$, correlating closely with the market. These great stock pickers and portfolio managers and their investors did not avoid the massive bear market. As the economy recovered after 1975 the performance of all the managers was very good-a reflection of their focus on firms in the inefficient small and micro-cap sector of the market.

Common Strategies. Several common themes emerge when examining the strategies of Mr. Davis, Munger, and Buffett. During the period they managed money all these managers generated excess returns for their investors. All of these investors:
(1) focused on very small publicly traded companies,
(2) ran concentrated portfolios,
(3) looked for companies with niche markets,
(4) focused on the longer term,
(5) were not afraid to buy illiquid stocks,
(6) wanted to buy firms with growth potential,
(7) looked for a company's the ability to generate attractive margins,
(8) bought their positions at reasonable valuations,
(9) managed a limited amount of assets so they could take advantage of the small company niche,
(10) tolerated above-average portfolio volatility,
(11) bought firms that they felt they understood,
(12) purchased only after conducting extensive due diligence,
(13) were not concerned few of the companies had Wall Street coverage or interest.

If we used these strategies today could we outperform the market as an active manager? Or are these strategies obsolete and only were effective during the periods when these investment legends managed their portfolio?

Active Management in Today's Market. The goal of the LSGI Fund is to grow our investor's capital. While as an active manager we wish we were aware of the strategies used by these legendary investors profiled above when we established the fund we were not - but we used academic studies of historical market data to identify what had worked in generating excess returns in the past. ${ }^{5}$

Not surprisingly many academic studies indicated that the stocks of small, illiquid, reasonably valued, and growing firms did very well compared to the major market indexes over time - factors quite similar to the attributes used by Buffett, Munger and Davis to find investments which generated substantial excess returns for their portfolios.

[^2]The LSGI Technology Venture Fund. In accordance with the historical market studies we assembled a concentrated portfolio of small, illiquid, reasonably valued, growing firms with a long term investment focus. The LSGI Technology Venture Fund is a partnership similar to the one run by Buffett and Munger prior to Berkshire Hathaway. We utilize 'screens' of factors that were closely correlated with stock outperformance in the past from a database of roughly 6,000 companies to find firms that might be attractive. We then conduct due diligence on the company and sector.

The performance of our LSGI portfolio has been as follows:


Note several things about the performance chart:

- Most actively traded mutual funds do not outperform the major market indexes over time. The S\&P 500 Index is generally used as a benchmark. In our chart only one of five actively traded mutual funds outperformed the S\&P 500 benchmark - about in line with overall market data.
- Actual investor returns in actively traded mutual funds are usually worse than noted above when measured by investor asset inflows and redemptions. For the LSGI Fund average investor returns were 7.8\% lower over the last 5 years than the net asset valuation return when accounting for inflows and redemptions of individual investors. Pubic funds report similar figures. Investor timing is a major problem for many investors and portfolio managers. Many investors tend to chase performance, tend to avoid undervalued portfolios, and sell at the wrong moments.
- Psychologists tell us that losses 'hurt' investors three times more than gains are 'pleasurable' - and they also note that brain scans of investors who have made quick gains resemble brain scans of cocaine or nicotine addicts about to get a 'fix'. So the volatility has some unexpected psychological effects on both the manager and the investors, which impacts asset flows into and out of the managed portfolio.
- The LSGI Fund is very volatile, much moreso than the other investment vehicles in the chart. If an investor considers volatility is a measure of risk, then the LSGI Fund is much riskier than the alternatives. On the other hand, if volatility is a measure of something else (like the illiquid nature of small cap markets), then volatility may not be a measure of risk but a measure of opportunity.
- Over time excess returns tend to compound, just like they did for investors in Buffett's, Munger's, and Davis' portfolios. Small excess returns can have major long term implications for investors. A \$100,000 investment in the LSGI Fund on April 1, 2001 would be worth $\$ 360,000$ on April 1, 2010 after all fees and expenses, while a similar investment in the S\&P 500 would have been worth $\$ 115,000$.

| Annual Performance as of 4/1/10 - Estimated* | $10+$ Yr. Life of the Fund |
| :--- | :---: |
| LSGI Technology Venture Fund - Gross Returns* | $15.7 \%$ |
| LSGI Technology Venture Fund - Net Returns* | $11.8 \%$ |
| Zacks Micro Cap Index - PZI NAV | $\mathrm{n} / \mathrm{a}$ |
| Russell Microcap Index | $\mathrm{n} / \mathrm{a}$ |
| Russell 2000 Small Capitalization Index | $4.6 \%$ |
| Standard \& Poor's Smallcap 600 Index | $7.4 \%$ |
| Standard \& Poor's 500 Index | $0.3 \%$ |
| Nasdaq Composite Index | $-1.1 \%$ |
| Dow Jones Industrials Index | $2.2 \%$ |

- The 6 month moving average reduces the volatility of the month to month data - and the long term trend of the LSGI portfolio is easier identified using the moving average.

Our portfolio as of April 1, 2010 is as follows:

| Company | Mkt. Symbol | Mkt. <br> Price | $\begin{array}{\|c} \% \text { Gain/Loss } \\ \text { over Basis } \\ \hline \end{array}$ | Navellier Grade | Mkt. Cap (Million) | Mkt. Cap. (Mill.- float) | Return on Equity | P/E Ratio Trailing | $\begin{array}{\|c\|} \hline \text { Price/Sales } \\ \text { Ratio } \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { Revenue Growth } \\ \text { Trailing } 12 \mathrm{mo} \\ \hline \end{array}$ | EPS Growth <br> Trailing 12 mo |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LSGI Portfolio Holdings |  |  |  |  |  |  |  |  |  |  |  |
| Almost Family Inc. | AFAM | \$37.75 | 85\% | C | \$324 | \$259 | 20.2\% | 13.2 | 1.3 | 40.7\% | 32.4\% |
| Arc Sight Inc. | ARST | \$28.47 | 86\% | B | $\$ 937$ | \$600 | 11.9\% | 91.8 | 6.4 | 31.0\% | 114.6\% |
| Arena Resources | ARD | \$33.40 | 661\% | F | \$1,288 | \$1,198 | 8.4\% | 30.1 | 10.5 | -39.7\% | -51.5\% |
| Art's Way Manufacturing Co., Inc. | ARTW | $\$ 6.09$ | 36\% | c | \$23 | \$13 | 6.1\% | 32.1 | 0.8 | -17.9\% | -58.3\% |
| Balchem Corp. | BCPC | \$25.00 | 74\% | c | \$700 | \$693 | 19.5\% | 26.9 | 3.4 | -8.6\% | 38.8\% |
| China Agritech Inc. | CAGC | \$25.58 | 92\% | A | \$423 | \$360 | 18.9\% | 22.4 | 7.4 | 35.6\% | 39.6\% |
| China Green Agriculture | CGA | \$14.05 | -10\% | A | \$331 | \$281 | 23.1\% | 16.0 | 8.3 | 51.7\% | 76.4\% |
| Crimson Exploration Inc. | CXPO | \$2.96 | -25\% | B | \$114 | $\$ 83$ | -25.4\% | $\mathrm{n} / \mathrm{m}$ | 0.9 | -40.1\% | n/a |
| Ebix Inc. | EBIX | \$16.07 | 43\% | B | \$545 | \$501 | 32.3\% | 13.1 | 5.8 | 30.6\% | 32.3\% |
| Evolution Petroleum | EPM | \$4.62 | New | B | \$126 | \$86 | -9.8\% | $\mathrm{n} / \mathrm{m}$ | 27.6 | -35.8\% | -205.0\% |
| GeoResources Inc. | GEOI | \$15.15 | 69\% | C | \$298 | \$149 | 6.2\% | 25.3 | 3.6 | -15.7\% | -33.3\% |
| Gulf Resources Inc. | GFRE | \$11.64 | 2\% | B | \$369 | \$314 | 40.1\% | 11.2 | 3.4 | 33.4\% | 37.9\% |
| Harbin Electric Inc. | HRBN | \$21.80 | New | B | $\$ 677$ | \$237 | 7.8\% | 32.5 | 3.0 | 84.2\% | -45.9\% |
| Hi-Tech Pharmacal Co . | HITK | \$22.52 | 3\% | B | \$272 | \$212 | 28.8\% | 8.8 | 1.8 | 76.9\% | 483.1\% |
| K-Tron International | KTII | \$149.99 | 353\% | B | \$433 | \$389 | 18.2\% | 18.4 | 1.9 | 0.2\% | -5.8\% |
| Lincoln Educational Services | LINC | \$25.40 | 38\% | C | \$680 | \$156 | 24.9\% | 13.7 | 1.8 | 46.4\% | 129.6\% |
| Longtop Financial Technology | LFT | \$32.26 | 18\% | A | \$1,675 | \$821 | 16.3\% | 24.6 | 12.4 | 57.2\% | 52.4\% |
| NCI Inc. | NCIT | \$30.51 | 6\% | D | \$404 | \$230 | 19.9\% | 18.5 | 1.0 | 20.0\% | 28.7\% |
| Quicksilver Resources | KWK | \$14.11 | 347\% | D | \$2,209 | \$1.413 | -137.3\% | n/m | 3.6 | 26.1\% | n/a |
| Median values: |  |  |  | C | \$423 | \$281 | 21.7\% | $20.5$ | 3.4 | 30.6\% | 32.4\% |

Note the overlap of GeoResources, Harbin Electric, Gulf Resources, and China Green Agriculture with the MTU APMP portfolio. We also have a large interest in Art's Way Manufacturing and are required to file SEC Form 13G on our holdings since we control more than $5 \%$ of the company's shares:

SECURITY OWNERSHIP OF PRINCIPAL STOCKHOLDERS
The following table sets forth the name and address of the persons known to the Company who beneficially own more than $5 \%$ of the issued and outstanding shares of common stock of the Company as of March 5, 2010.

| Title of Class | Name of and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership ${ }^{(1)}$ | $\begin{aligned} & \text { Percent of } \\ & \text { Class }^{(2)} \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Common Stock | J. Ward McConnell, Jr. 4309 Mariner Way Ft. Myers, Florida 33919 | 1,544,991 shares ${ }^{(3)}$ | 38.70\% |
| Common Stock | Joseph R. Dancy 1007 Beaver Creek Duncanville, Texas 75137 | 270,950 shares $^{(4)}$ | 6.79\% |

(1) Beneficial ownership is determined in accordance with SEC rules and generally includes holding, voting and investment power with respect to the securities.
(2) Based on 3,990,352 shares issued and outstanding as of March 5, 2010.
(3) Includes $1,542,991$ shares held in the J. Ward McConnell, Jr. Living Trust, of which the reporting person has sole investment and voting power, and 2,000 shares underlying currently exercisable options.
(4) As set forth in the Schedule 13G/A filed February 11, 2010, includes 106,950 shares held by Mr. Joseph R. Dancy, individually, 32,000 shares held by Ms. Victoria A. Dancy, individually, and 132,000 shares held by LSGI Technology Venture Fund L.P., a Texas limited partnership ("LSGI Fund"). LSGI Advisors Inc., a Texas corporation of which Mr. Dancy is the sole owner and officer, is the general partner of LSGI Fund. Mr. Dancy, Victoria A. Dancy, the Joseph R. Dancy Irrevocable Trust (for the benefit of Joseph R. Dancy), the Victoria A. Dancy Irrevocable Trust (for the benefit of Victoria A. Dancy), Mr. and Mrs. Dancy's two minor children, and LSGI Advisors are limited partners of the LSGI Fund.

Like the early prospectors in Michigan's Copper Country who found great challenges and difficulties, and in some cases great wealth ${ }^{6}$, the small capitalization sector is rich with opportunities. Buffett, Munger \& Davis have shown that small companies can be, in every sense of the word, the investor's Mother Lode.

[^3]
[^0]:    ${ }^{1}$ This presentation is for the sole use and benefit of undergraduate finance students at Michigan Technological University's Applied Portfolio Management Program.
    ${ }^{2}$ See: "The Little Book of Common Sense Investing: The Only Way to Guarantee Your Fair Share of Stock Market Returns", (Wiley Publishing 2007) by John C. Bogle.

[^1]:    ${ }^{3}$ Buffett started his first private investment partnership in 1957. He convinced a number of Omaha individuals to invest $\$ 25,000$ each. Buffett put in $\$ 100$ of his own money, appointed himself general partner and began to purchase small undervalued stocks. His goal was to beat the Dow Jones Industrial Average by an average of 10\% a year. When he dissolved the partnership in 1969 Buffett's investments had ballooned at a compound rate of $30.4 \%$ annually, compared to just $8.6 \%$ annually for the Dow. The return on Buffett's initial $\$ 100$ investment would certainly be described as "incredible". Mr. Buffett is currently Chief Executive Officer of Berkshire Hathaway (NYSE symbol: BRKA).
    ${ }^{4}$ Had Mr. \& Mrs. Othmer invested in the S\&P 500 index instead of with Mr. Buffett they would have an account worth roughly $\$ 2.7$ million (a return of around $11.8 \%$ a year) - very impressive. But not anywhere near the almost $\$ 800$ million obtained with Mr. Buffett (annual returns of around 24.1\%)

[^2]:    ${ }^{5}$ See in general: James O'Shaughnessy, "What Works on Wall Street" reviewed 42 years worth of market data, and Dr. Benson Durham at the Federal Reserve System studied 37 years of data and published a research paper entitled "The Extreme Bounds of the Cross-Section of Expected Stock Returns" (as well as others who have done similar studies).

[^3]:    ${ }^{6}$ Shareholders in successful mining ventures in the Keweenaw Peninsula could do quite well. Henry Hobart, school teacher at Clifton (a ghost town located near Eagle River), wrote on February 3, 1864 that: "Many have made a fortune by investing their money in stock. This is an easy way but it also an easy way to lose a fortune. But it is said that a man must run some risk if he wishes to make anything." Hobart references the wealth created by investing in mining stocks numerous times in his diary - and indicates that he purchased shares in the North Cliff mine during this time period. See: Hobart, "Copper Country Journal, The Dairy of a Schoolmaster, 1863-1864" (republished 1991).

