

# Trojan April 7, 2008 Issue 2 - Volume 1 Investing Newsletter

#### Welcome to Our Second Issue!

In our continuing efforts to improve the content of TIN, we are pleased to announce that we are now working with the Trojan Real Estate Association to bring you articles about real estate trends and investing.

We would like to again thank our many contributors, and those who have invested their time and effort to make the Trojan Investing Newsletter all that it can be. If you are interested in contributing, please contact us at **trojan.investing.newsletter@gmail.com**. For those of you who are new to our newsletter, thank you again, and read on to find out how you can benefit from joining our readership.

Through issues distributed at the beginning of each month, the Trojan Investing Newsletter hopes to bring ideas together that stimulate new ways of thinking to benefit you as an investor. Through critically analyzing economic and sector/industry trends as well as individual securities, we hope to provide you with new insight into how to view the world as a place to invest.

We are affiliated with the Trojan Investing Society, the premier finance and investing club at USC. The weekly TIS meetings are a great place to come to express your opinions on the articles written; and where the contributors of those articles will have a chance to answer any questions you have. Being allowed access to a variety of investing ideas through this forum has given our first issue depth and breadth that we would otherwise be unable to afford our readership. We hope to further add to this variety through the inclusion of book reviews, guest articles, and interviews.

"The world is changing very fast. Big will not beat small anymore. It will be the fast beating the slow."

-Rupert Murdoch

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#### **Market Performance Snapshot**

	1-Mar	31-Mar	Return	
Dow Jones	12258.9	12262.89	0.03%	
S&P 500	1331.34	1322.70	-0.65%	
NASDAQ	2258.60	2279.10	0.91%	
Russell 2000	684.22	687.97	0.55%	
10-Year T-Bill	3.53	3.43	-2.78%	

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# Downtown LA Real Estate

#### By Dario Hosseinyoun

It's 85 degrees and after a long day of work, you go to your rooftop pool to cool off and unwind. As you look out over the building, you see the Los Angeles lights illuminate the skyline. You have one of the biggest and most renowned cities in the world at your feet and are located right in the center of it--downtown Los Angeles that is.

The downtown revitalization projects are making this dream a reality. With 157 projects underway, downtown Los Angeles is shruggin off its image as the manufacturing and industrial eyesore in the middle of L.A., and is slowly gaining the reputation of being a luxury center. Johnny Depp and other Hollywood celebrities and wealthy individuals are already looking to call downtown their new home (Evan George).

Spearheading the development of downtown are three major real estate development firms:

- 1. MJW Investments
- 2. Milbank Real Estate Services
- 3. GH Palmer Associates

Each one of these firms is competing for market share in the high-end residential market. They are also responsible for downtown's facelift, which has caused a demographic shift in downtown's population.

#### The Projects

Santee Village: MJW's featured development consists of a "780,000-square-foot, nine-building project on the block between Los Angeles, Maple, Seventh and Eighth streets" (Evan George). The project offers 216 loft homes from 700-square foot studios to 2,000-square foot penthouses. As histocial manufacturing buildings, the Santee, Eckardt and Cornell offer up to 70% property tax savings under the Mills Act.

The Roosevelt: Milbank Real Estate Services has renovated the historical building, creating 222 new upscale condominium units in the heart of downtown between Flower and Seventh streets. These lofts have starting prices of "\$400,000 and can go all the way up to \$1,000,000" and range from 800 to over 2,700-square feet (Evan George).

Orsini II, Orsini III, Piero II: GH Palmer has topped itself with 1376 new luxury apartment units are ready to be rented out. Both Orsini projects are located on Figueroa Street and Piero II can be found on Sixth and Bixel streets. With virtual bowling and golf, an outdoor putting green, and a rooftop pool (just to name a few), the Orsini II might be a cause of distraction for those who are career focused. Each of these projects has created a self-sustaining community for itself where residents with a tight schedule do not need to leave the apartments in order to eat or do the things they enjoy.

From these examples, it is clear that developers are chasing big margins through luxury apartments for those in the highest tax brackets. Further, amenities and services like those mentioned previously demand a price premium, drawing only the upper-income individuals that developers are targeting.



Top: The Roosevelt, Source: Rsvlt.com Middle: Santee Village, Source: Santeevillage.com Bottom: The Orsini II, Source: TheOrsini2.com

#### The Buyers

The downtown Los Angeles market is a prime example of a market undergoing gentrification. Although downtown has the largest concentration of homeless people in the US—roughly 8,000 people—the last few years of development has caused a significant demographic shift (Valle). Since the "entire downtown area is being renovated to attract business, rents have gone through the roof…[and the] homeless are being forced more and more to move away from Skid Row to make room for all the development taking place downtown" (Valle) (District).

In contrast to the previous group of downtown residents, the new residents living there have the second highest per capita income in all of Los Angeles County (as of 2005). Additionally there has been a 20.8% increase in the number of people living there and a \$3,300 increase in the median income between 2004 and 2006 (District). In downtown, it is not uncommon to see a luxury loft project being built next to government subsidized housing buildings, which house those with very low income. It is also becoming more common to see a new high-rise construction overshadowing a few homeless tents.

While it is certain that many downtown residents relocate for the convenient access to their jobs in the area, the past few years have brought a diverse mix of people--from retirees to young professionals and hipsters. Despite the diverse interests if the new residents, a renaissance is in full swing from residential changes, such as the Roosevelt and Santee Village projects, to cultural changes such as the LA Live project, and the

Broadway transformation effort. What we have seen is just the tip of the iceberg. More than 6,000 units were planned on opening in 2007, playing a major role in the transformation of the downtown area to a more habitable place for businessmen and others (Flynn). The vast majority of these units are market rate condo and loft projects, which are hoping to cater to the "new downtowners". It is common to see new lofts and condos in downtown selling above \$500,000, pushing downtown L.A. further

into a realm of unaffordability for the vast major-

ity of Los Angeles residents. However, this further stimulates the change of the population from low class and uneducated individuals to the most elite and educated residents of Los Angeles County.

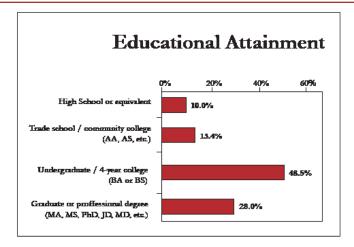


Figure 2: Los Angeles Downtown Center Business Improvement District

With buyers being more educated and coming from higher on the socio-economic scale, there are also growing expectations of what downtown should be--from upper-end restaurants to luxury gyms, to private membership clubs. A few years ago, building infrastructure for these services would not have even been considered. Furthermore, students from FIDM, USC, Loyola Law, and Southwestern Law are also among new buyers in the downtown market, often having their purchases financed by their parents. As downtown nightlife and amenities become more established and as the demographic shift takes full effect, it will become increasingly common for students and young professionals to settle in downtown.

#### The Result

Downtown LA is going through one of the biggest develop-

mental changes in its history. If all goes well, Downtown Los Angeles could become a financial and residential city like Manhattan. With all the theatres and the railway station that used to be in downtown, downtown Los Angeles was once a cultural center with theatres that rivaled Manhattan's and a public transportation that was effective. The three aforementioned developers, along with many others, are trying their best to breathe life into the neglected area and hope to once again make it a global center of attraction. A physical, cultural, and demographic change are sweeping through downtown. Downtown Los



Source: Dancepro.co.jp

Angeles is a classic case where profit-motivated businessmen have come together to make a difference, and a profit.

# ETN - The New ETF?

#### By JordanOhama

In 2006, Barclays Bank PLC issued the first exchange-traded note (ETN) through its iPath subsidiary. This paved the way for the rise of a new and unique security. After watching Barclays' success from the sidelines, other major banks have begun issuing their own line of ETNs.

#### Issuers of ETNs:

Barclays - iPath June 2006
Goldman Sachs August 2007
Swedish Export Credit Corporation August 2007
Lehman Brothers February 2008
Mordan-Stanley - Market Vectors March 2008

An ETN is an unsecured<sup>1</sup>, unsubordinated<sup>2</sup> debt security that tracks the price changes of an underlying index. ETNs offer an array of underlyings such as exchange rates, commodity indices and complex trading strategies not offered by ETFs.

#### Factors to consider when purchasing ETNs:

ETNs are unique among securities and because of their differences, a number of additional factors must be taken into consideration before investing in them. These include:

- 1. Tracking Error
- 2. Fees
- 3. Tax Consequences
- 4. Time Until Maturity
- 5. Capacity Constraints and Volume
- 6. Credit Rating of Issuing Company

#### **Tracking Error**

Tracking error is the difference between the price of an ETN or ETF and their underlying securities. Issuers tout that ETNs produce no tracking error because they track the value of their underlying indexes through the redemption/payout value of the notes as compared to a portoflio of stock and derivatives that ETFs use.

1 **Unsecured** - Backed by the integrity of the issuer rather than by collateral

2 Unsubordinated - senior level debt that has access to income from sale of assets above junior debt in case of bankruptcy or company liquidation ETFs are able to minimize tracking error by allowing traders to exchange baskets of the underlying securities for ETF contracts. In contrast, the ETN allows traders to redeem these notes directly to the issuer at the *indicative value*—the value of the index the ETN is tracking. This acts as a corrective force in case the ETN is trading at a premium or discount to the indicative value.

#### **Fees**

Both ETFs and ETNs have fees. Although they differ from issuer to issuer, ETNs typically have a higher annual fee. One of the reasons for this is because ETNs track indices that would be very costly and difficult to track with other instruments.

ETNs also have a redemption fee when an investor redeems the notes with the issuing bank. Once again, each issuer has different fees for their ETNs so investors should carefully read the prospectus.

#### Tax Consequences

Although the IRS has not decided how to classify income from ETNs, Barclays suggests that ETNs be treated as *forward contracts*. This means that when closing a position in an ETN before maturity, the investor realizes capital gains or losses. Upon maturity though, gains on currency-related ETNs should be treated as ordinary income, while gains on the other ETNs should be treated as capital gains.

Unlike ETFs and Mutual funds, ETNs do not have income and capital gains distributed at the end of each year because they do not need to continuously rebalance an underlying portfolio of securities. ETNs also do not pay out dividends or interest during the year. For example, if an investor holds onto an ETN, there would be no taxable gains or income until she closed her position or the note matured.

#### Time Until Maturity and Volume Constraints

Time until maturity is a factor that should be considered because of the relatively illiquid nature of ETNs. Although ETNs can be traded on the major exchanges, investors are still not as comfortable with them as they are with stocks and ETFs—the low daily trading volume on ETNs is indicative of this fact. Because of the low levels of liquidity, the time until maturity can determine how an investor closes his/her position in an ETN. Selling an ETN on the secondary market is subject to the risk of inadequate volume and tracking error, but can be done at any point the markets are open. Redeem-

ing it with the issuing company will incur a redemption fee and may require a minimum number of notes, but guarantees the exact price of the market index it is tracking. Holding onto the note until it matures exposes the holder to the volatility of whichever index the ETN is tracking, but is not subject to any of the costs or risks previously mentioned.

#### Credit Rating of Issuing Company

The only principal protection that ETNs offer is the ability of the issuing company to pay down the note. This ability can be measured through the credit rating of the issuing company. This information can be found on the websites of the issuing companies or their subsidiaries. For example, on the Market Vectors website, it is stated that:

"The credit ratings for Morgan Stanley's senior debt are Aa3 for Moody's and AA- for Standard & Poor's. The outlook for Morgan Stanley's senior debt rating by each rating agency is negative, and Standard & Poor's placed the senior debt credit ratings on Credit Watch with negative implications on December 19, 2007."

It should be noted that as we are in what some have dubbed a "credit crisis," the credit ratings for issuing banks may not be reflective of their current financial strength.

The iPath website also provides a comparison of the qualities of ETNs and ETFs:

Table 1: ETN vs. ETF

	ETN	ETF			
Registration	Securities Act of 1933	Investment Company Act of 1940			
Recourse	Issuer Credit	Portfolio of Securities			
Institutional Size redemption	Daily to the issuer	Daily via custodian			
Short Sales	Yes	Yes			

Source: www.ipathetn.com

In all, ETNs offer a unique service to the capital markets by providing access to indices that would not normally be offered to the individual investor. ETNs also provide a new means of raising capital for issuing firms—which today, could be the difference between survival and bankruptcy. It may though, be a while until ETN's become a mainstream investment vehicle because of the current lack of trust in the large financial companies issuing these notes. If ETNs survive the current "credit crisis" though, they may be the next big thing.



Source: www.telegraph.co.uk

#### iPath ETNs:

Commodities	Ticker
DJ-AIG Commodity Index Total Return	DJP
DJ-AIG Agriculture Total Return Sub-index	JJA
DJ-AIG Copper Total Return Sub-Index	JJC
DJ-AIG Grains Total Return Sub-Index	JJG
DJ-AIG Energy Index Total Return Sub-Index	JJE
DJ-AIG Industrial Metals Total Return Sub-Index	JJM
DJ-AIG Livestock Total Return Sub-Index	COW
DJ-AIG Natural Gas Index Total Return Sub-Index	GAZ
DJ-AIG Nickel Total Return Sub-Index	JJN
S&P GSCI Total Return Index	GSP
Crude Oil Total Return Index	OIL
Currencies	
EUR / USD Exchange Rate	ERO
GBP / USD Exchange Rate	GBB
JPY / USD Exchange Rate	JYN
Emerging Markets	
MSCI India Index	INP
Strategies	
CBOE S&P 500 Buywrite Index	BWV
Optimized Currency Carry	ICI

Source: www.ipathetn.com

# Hurco Companies, Inc. - Machining Money

#### By Alexander Muhr

Recommendation: Buy

Snapshot	
Company Name:	Hurco Companies, Inc.
Ticker Symbol:	HURC
Closing Price (April 4):	\$46.56
Market Cap:	\$300 Million
P/E (ttm)	12.95x

Source: www.finance.yahoo.com

#### Company Background

Hurco Companies, Inc. designs, manufactures, and sells computerized machining tools equipped with interactive computer control systems. During 2007, the company rolled out their new WinMax software, which allows the user to create complex two or three-dimensional machining programs directly from an engineering drawing or computer-aided design file. The key point here is that an operator can create a machine tool program with minimal training. The machines are also loaded with Windows, so that they can be seamlessly integrated into a company's network.



Source: Hurco.com

# HURC aims to help manufacturing companies using computer-controlled machines tools better able to:

- -maximize efficiency of their human resources
- -continue to expand their capability of making more advanced and complex parts from a wide range of materials and multiple processes
- -maintain the ability to incorporate fast moving changes in technology into their operations to keep their competitive edge
- -continue to integrate themselves into the global supply chain of their customers by supporting small to medium lot sizes for "just in time" initiatives

#### **Demand**

Hurco's products are sold through more than 170 independent agents and distributors in North America, Europe and Asia. There are also direct sales personnel in Canada, England, France, Germany, Italy, Singapore and China. The industries served by the company's products are primarily aerospace, defense, medical equipment, energy, automotive/transportation, electronics and computer equipment. No single enduser or distributor of the products accounted for more than 5% of total sales and service fees. Being engaged in a number of markets and having a diversified customer base lowers the risk associated with this company's income. Further, approximately 89% of the worldwide demand for computerized machine tools and computer control systems is outside of the United States insulating it from a slowdown there.

#### Catalysts

When you look at a stock that might be undervalued, there need to be reasons for why it will eventually achieve fair value. Here are some of the reasons why I think that Hurco will reach that point:

#### The Dollar

Although the theme of a weakening dollar has been played out in the media, it *is* having an impact on American corporations, and Hurco is one company that is benefitting greatly from this trend. As stated above, 89% of demand for their types of machines comes from outside the United States. With 67% of revenues in FY 2007 coming from Europe, the earnings Hurco receives there is more valuable in the US due to their Euro origin. With the Federal Reserve printing

money and the CPI¹ on the rise, this trend shows no signs or slowing. On the other hand, American companies that are suffering from the dollar, will also be tempted to buy Hurco's products to improve their efficiency per worker during harsh economic times.

#### The Product

To sustain a competitive advantage—especially in the technology business—is very difficult because it is rapidly changing. With Hurco, this can work to its advantage. When a company decides to make a capital investment and buy a product, that is one order that Hurco can book. The more product booked, the more service fees that Hurco can levy, and the more likely a company becomes a repeat customer because the employees begin to get used to the interface. Also, the interface that Hurco has developed is relatively fool-proof, while also adding the ability to make very complex parts. In the highly specialized world of machining parts, simplicity is invaluable, therefore creating a competitive advantage for Hurco. A barrier to entry is also created due to price, because it is much easier for a company to just buy one machine and have Hurco service it, rather than building the technology themselves.

#### Growth

The company has been able to consistently deliver high rates of growth. Since 1997 Sales have had a CAGR<sup>2</sup> of 7% and a Net Income CAGR of 4%. However since 2003, Sales have risen at a CAGR of 20% and Net Income by 114%. As the world continues to grow and adopt more sophisticated technology, especially in Asia (China and India), Hurco's product will be demanded by a growing specialized manufacturing base. International growth is one aspect management is focusing on, while domestic US growth can be seen as a bonus.



Source: Hurco.com

#### CPI = Consumer Price Index

A basket of consumer goods and services purchased by house holds

CAGR = Compound Annual Growth Rate

#### **Financials**

- Since 2001 Hurco has been averaging an ROIC<sup>3</sup> of 20%, with the last 4 years averaging 60%
- For the last 3 years Net Change in Working Capital<sup>4</sup> has been +\$16 Million, which could let the company take on some debt to finance acquisitions in a market downturn
- Currently, the company is trading at an EV/EBITDA<sup>5</sup> of about 7 this is very low for a fast-growing company
- Free Cash Flow Yield is 6%, which is very reasonable for a company like Hurco
- The company has 12% of its market cap in cash

#### Valuation

Based on the EV/EBITDA ratio, I am going to estimate that Hurco should at least be valued at 12x. This is based on the fact that it could easily use leverage to expand, and because the company is growing rapidly. The multiple could easily be higher, but staying conservative is better. It is also difficult to find comparable companies because most are not public. The 12x valuation brings fair value to about \$80 per share.

I also did a Free Cash Flow valuation, where I am going to assume a discount rate of 16% (using the CAPM model). The rate is relatively conservative because I see inflation being a factor, and volatility (beta). In a model I created of the company's earnings and free cash flow until 2011, I believe that it is reasonable to assume that over the next 10 years Hurco can achieve a free cash flow CAGR north of 20%. When you think about it, this seems very high, but the company has a very high ROIC and has been able to produce returns higher than that over the years. I also assume per year share-count growth of 1%. When all is said and done, the value per share comes to be \$70.

I feel that it is reasonable to assume, based on the prospects I have discussed, that Hurco's shares are worth between \$70 and \$80 per share. This valuation includes estimates to account for the next few years being tough for business, but overall the company is profitable and growing, while trading at multiples for a business that is not.

<sup>3</sup> ROIC = Return on Invested Capital = NOPAT / Invested Capital

Working Capital = Current Assets - Cash Marketable Securities - Non-interest-bearing liabilities
Working capital is basically the amount invested in running the operations of the business.

<sup>5</sup> **EV/EBITDA = Enterprise Value / Earnings Before Interest, Taxes, Depreciation and Amortization**A ratio similar to P/E which down not takes the capital structure of the business into consideration.

# Verigy Ltd. - Stagnant Growth

### By Matthew Riley Recommendation: Hold

Snapshot	
Company Name:	Verigy Ltd.
Ticker Symbol:	VRGY
Closing Price (April 4):	\$21.10
Market Cap:	\$1.27 Billion
P/E (ttm)	10.97x

Source: www.finance.yahoo.com

People often focus on large-cap¹, name-brand companies. While these may be relatively stable and safe, it is important for investors to consider the risk/reward tradeoff and diversify their portfolios with some small-cap² companies. One such company is Verigy Ltd. (VRGY). The firm conducts business in the upstream segment of the supply chain, with products that test semiconductors for effectiveness. These semiconductors are used in computers, flash memory and consumer electronics. Verigy operates in three markets: North America, Europe, and the Asia-Pacific region.

#### Asia-Pacific Region

Verigy's presence in the Asia-Pacific market is very appealing. Because it is based in Singapore, the firm is not only able to take advantage of tax benefits, but can operate through the perspective of an Asian company. Singapore has an 18% corporate income tax and no capital gains tax. Compared to the United States' 35% (for an income similar to Verigy's) and 15% respectively.

From 2005 to 2007, revenues from the Asia-Pacific region grew 17%, allowing Verigy to realize the area's growth potential for the future and to further focus operations on the region as being the most important for the firm's well-being. Large developments are being erected in Macau, which in 2007, had gambling revenues that surpassed those of Las Vegas. Also, according to Invest Hong Kong, a government-controlled operation, Chinese manufacturing facilities will move to Vietnam due to high costs where existing facilities are located in the Shenzhen area. Both of these represent growth opportunities for semiconductor manufacturers (and thus Verigy) because new developments require computerized infrastructure.

- 1 Market Capitalization = (stock price) \* (# outstanding stock) Large Cap = a company with a market capitalization over \$10 billion
- 2 Small Cap = a company with a market capitalization between \$250 million and \$2 billion

#### **Opportunities**

A strong balance sheet is a must for a company that wants to have long-term growth. As of the quarter ended January 31, 2008, Verigy had 15% of its market capitalization in cash. Also, since the company has been public, it has never had any debt. This reflects highly on the firm's commitment to maintaining its liquidity, which allows for growth to occur in the future. Furthermore, 75% of shares are held by mutual funds and institutions, demonstrating the high degree of confidence of "smart money" in Verigy.

#### Challenges

Verigy is highly dependent on a small number of its customers. In 2006, 10% of revenues were attributed to a single customer, while in 2007, two customers accounted for 38% of revenues. This degree of reliance is very risky for Verigy because revenues could take a huge hit if one or both of these customers went to a competitor. Net income more than doubled from \$13 million to \$32 million for the first quarter of 2008 when compared to the first quarter of 2007. While this is favorable growth, Verigy's 2007 annual report conveys that the firm expects quarterly results to "fluctuate significantly from period to period." The company also states that the semiconductor industry is cyclical in nature and therefore past growth does not necessarily dictate growth in the future. Additionally, the market for semiconductor test equipment is highly concentrated. Because of this, Verigy already has a substantial amount of market penetration. The only way for the firm to increase revenues would be to sell more of its products to existing customers. Sure, there may be opportunities with new construction, but in an economic downturn, revenues will suffer.

#### Recommendation

All taken into consideration, Verigy's Asian focus is the most attractive aspect of the company. While its balance sheet may be strong, the fluctuations in demand for semiconductors and the fact that so few new customers are available pose a threat for Verigy's future. I am therefore recommending a HOLD on Verigy until sustainable growth can be had.

### Stock Pick Recap - What Were We Thinking?!?!?!



Source: www.deminvest.worldpress.com

As the last issue of the 2007-2008 academic year, we would like to take some time to look back upon the stock picks that our contributors have made. Unfortunately, as this is only our second issue, we have but a handful of stocks to look at.

	Recc.	3-Mar	31-Mar	Return	
AAPL	Short	121.73	143.50	-15.17%	
AEO	Long	21.05	17.51	-16.82%	
FFH	Long	287.14	287.10	-0.01%	
FINL	Short	3.97	4.76	-16.60%	
PRAA	Long	37.03	42.89	15.83%	
RIG	Long	139.25	135.20	-2.91%	
10-year T-Bill	Short	3.53	3.43	-2.78%	

#### AAPL:

AAPL stock has been moving upward with the markets recently, and has actually beat the market as anticipation for the 3g iPhone builds.

#### PRAA:

The Jackson, TN call center is most likely continuing to improve productivity, although we will not know for sure until the next quarter's results. The favorable market conditions

will contribute to earnings in the future. The P/E (ttm) still stands at 14x, which reflects a slow-growth business, but as the economy continues to deteriorate, PRAA stands to profit from its experience, favorable market conditions and the ability to collect. Overall, PRAA continues to be a very strong Buy.

#### AEO:

On March 12th AEO reported a 6.4 percent drop in fourth quarter profit versus the third quarter. Same-store sales also fell 2 percent in the fourth quarter. Earnings were 66 cents per share, which were in line with estimates. Total sales also rose by 2%. Shares have performed well because the company has been able to adjust to the tough market conditions by cutting expenses and more conservative approach to inventory. Operating margin was at 21 percent, which is great considering the tough market.

On April 3rd the Martin + Osa launched its e-commerce web site – targeting 28 to 40 year old men and women.

#### FINL:

This stock has been moving up on good news from better than expected earnings reports. In its fiscal fourth quarter, FINL had a narrower than expected loss of \$0.06 a share, beating the Wall Street concensus of \$0.18 a share.

#### FFH:

On March 11th FFH was put on positive rating outook by Standard & Poor's Ratings Services for its "counterparty credit and financial strength." On March 24th FFH bought \$350 Million in convertible bonds (at \$10 per share and carry an 8% coupon for a five-year maturity) from AbitibiBowater (ABH). FFH also has the right to appoint 2 directors to the company's board.

#### RIG:

On March 11th Federal antitrust regulators approved a \$230 Million sale of three offshore rigs in the Gulf of Mexico to Hercules Offshore (HERO).

On March 27th RIG won a contract extension with Shell worth a possible \$759 Million for its ultra-deepwater semi-submersible rigs. The Deepwater Nautilus will be contracted for at least 3 years (\$586 Million) with an option for a fourth year.

# An Introduction to Call Options

#### By Joshua Inouye

Think Apple is headed up? If for some reason you are extremely confident that Apple's stock will rise, say, \$20 by April 18th, buying a call will most effectively leverage your position—maximizing profits. If you bought stock on March 11th, and AAPL has risen \$20 to \$147.35 by April 18th, you would enjoy a return of 32% on your investment (before margin interest), and would be patting yourself on the back until you realized that if you had bought calls, you could have made a whopping 167% on your investment!

Options may seem confusing at first, but by the time you finish this article, it is my hope that you will understand what a call option is and how it provides leverage—the ability to generate large profits (and possibly losses) with a small investment. There are American-style and European-style options, and both styles of options can be priced based on underlying assets that are not stocks. Puts are also another type of option contract, but this article will focus on American-style call options on stocks.

### Call options on stocks are contracts which have 3 main components:

- 1. The underlying (e.g. AAPL stock)
- 2. The strike price (e.g. \$125)
- 3. The expiration date (e.g. April 18th, 2008)

#### In effect, a call option says:

"I have the right to buy 100 shares of AAPL (the underlying) at \$125 (the strike price) a share anytime before or on April 18th, 2008 (the expiration date) if I so choose."

This contract is *bought* by someone who wants the opportunity to buy 100 shares—in general, a single stock call option is for the purchase of 100 shares of the underlying—of AAPL at the strike price up until the expiration date. It is *sold* by someone who is willing to sell the stock at the strike price to the buyer if the buyer wishes to do so. If the call option buyer uses this opportunity to buy 100 shares at the strike price from the call option seller, he has exercised the option and the seller has been assigned the option.

Table 1. Option Traders

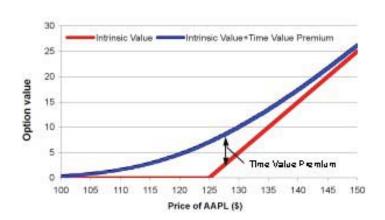
Purchaser of Contract	Right to buy shares at strike
	price
	Obligation to sell shares at strike price

It is important to note that the call option buyer has the option to buy the stock, and the seller is obligated to deliver the stock if the buyer exercises the option, and must borrow and sell it short if he does not already own it.

#### **Option Pricing**

For the above example, on March 11th, 2008, AAPL closed at \$127.35. Let us assume that the opening price of AAPL on March 12th will be around \$127.35, for simplicity. If we own the example contract, we can *exercise* the option to buy the stock at \$125 per share and then we can immediately sell it in the open market for \$127.35. *BLASH!* (Buy low and sell high, to borrow a term from Jack Schwager). We would have just made \$2.35 on 100 shares or a total of \$235 on the transaction. It is easy to see that the call contract should be worth at least \$235. This is called the intrinsic value of the option—the profit that would be made by exercising the option and immediately selling the stock at market price (the red line in Figure 1).

Figure 1. Value of AAPL 125 call option before expiration.



The closing price for the April 125 call option on AAPL was \$8.37 (per share, which means one contract costs \$837). We already said that this contract has \$2.35 of intrinsic value. The other \$6.02 is what is called time value premium. Time value premium is the amount above the intrinsic value that you pay for an option. The blue line in Figure 1 is the total option value. Another way of looking at time value premium is that it is the price that is paid for leverage on the upside and



Source: CBOE.com

limited loss on the downside (dollar-wise). So your gains are leveraged more than your losses, in a sense.

Time value premium decreases to \$0 at expiration. For Figure 1, this means that the blue line gets closer and closer to the red line as expiration approaches. If there is a longer time period for the stock to fluctuate, it has a greater chance to advance more and produce more profit than if there were less time to expiration, and the option is worth more. It also has a greater chance to fall more, but if that happens, the losses are limited to the original amount paid for the call. By the same argument, more volatile stocks will also have more time value premium. Volatility is extremely important in determining the price of an option. Time value premium is also greatest when the stock price is nearest the strike price. This effect can be seen in Figure 1, which shows the largest time value premium for the option when the stock is at the strike price of \$125.

Let's go back to the example. If we buy 100 shares of AAPL stock at \$127.35 and it falls to \$107.35, we lose \$20 per share. If it rises to \$147.35, we make \$20 per share. If we instead buy the April 125 call at \$8.37 and AAPL falls to \$107.35 at expiration, we do not exercise and we lose what we paid for the call (\$8.37 per share). This is much less than a \$20 loss if we had bought the stock. If it rises to \$147.35, the option will be worth \$22.35, and we will have made \$13.98. So we lose less (dollar-wise) if the stock falls, and we also gain less (dollar-wise) if the stock rises. However, the story for percentage gains and losses is completely different, and this is where the concept of leverage comes in, which explains why so many people are scared of options, why options can be so risky, and also why they can make you rich. If we invest in

100 shares of AAPL, on a \$20 move, we make or lose 16% of our initial investment, depending on the direction of the move, or perhaps even double that, if we buy on margin. If we invest in the call option and the price drops \$20 (or any more than \$2.35, for that matter), we lose 100% of our investment! However, if the price rises by \$20, we will have a 167% gain on our investment! Note that a call purchase cannot be made on margin—it must be paid for in full with cash—so we cannot double this 167% gain as we could on a similar gain in a stock. The results can be seen in Table 2.

Table 2. Returns of Various Investment Strategies on AAPL Until Option Expiration.

Investment	AAPL Price Move		AAPL Price Move			
	-\$20	\$0	+\$20	-\$20	\$0	+\$20
Buy 100 shares	-\$2000	\$0	+\$2000	-16%	0%	+16%
Buy 200 shares, 50% margin	-\$4000	\$0	+\$4000	-32%	0%	+32%
Buy 1 call	-\$837	-\$837	+\$1398	-100%	-100%	+167%

Note that margin interest is not included for simplicity since the time frame is short.

#### **Potential Risks**

Now, let's not get too excited. Since options provide leverage, they can produce very large losses in a short amount of time. Larry McMillan, one of the foremost authorities on options strategies, recommends that no more than 15% of a portfolio's value should be used to buy call options outright. Let's not get scared either. When used properly (there are many strategies involving call options, many which are even less risky than stock ownership), call options can be used to limit stock market risks and enhance returns, which contradicts popular thinking about options.

I hope this has helped you to understand what a call option is and how it can be used to leverage stock (just one of its many possible uses). Maybe it has built upon previous knowledge you may have had. Maybe you already knew all of this. Whatever the case may be, don't be discouraged if you don't understand this stuff right away. Options are very complex in many ways. Even the basics are not easy in the beginning. There are hundreds of explanations online if you want to look at those. A good website that I used when I was first learning about options and their intricacies is www.cboe.com. Go to the Learning Center tab, and then click on The Options Institute.

# Valuation Metrics

#### By Alexander Muhr and Matthew Riley

Being able to determine the financial strength of a company is vital to valuing it. This is done through reading the fine print on financial statements and analyses of the numbers therein.

Before we can get started on the metrics, you must first know the different statements that are available and how to access them. There are two main SEC forms that can be accessed through Yahoo!Finance.com or directly from EDGAR Online through the USC Marshall Online Resources site. These statements are called the 10-Q Quarterly Report, and the 10-K Annual Report. As implied by their names, the 10-Q is issued quarterly and contains information about the previous quarter's results, while the 10-K informs investors of the previous year's results.

Within the SEC filings are the accounting statements—the Balance Sheet, Income Statement, Cash Flow Statement and the Statement of Owner's Equity. Although the numbers from these statements are telling of a company's financial strength, it is important to read through the rest of the report to find out the activies of the company and how the financial numbers were ascertained. Once you have read through the report, you can begin to calculate the following ratios with relative certainty. It is our hope that you will be able to use them in your future stock analyses.

#### Gross Margin

(Revenue - Cost of Goods Sold (COGS)) / Revenue

Gross Margin tells you how much money the company makes from each sale – after their cost of making the product or service. The margins vary for different sectors and industries, but comparing these ratios to competitors, historical margins for the company or future margins for the company may yield valuable information about how the company is maturing, changing or dealing with a shifts in its target markets.

#### Operating Margin

(Revenue - All Operating Costs) / Revenue

Operating Margins take the Gross Margin and adds in the extra costs of running the business – such as administration, marketing, etc. These margins also vary by business, but if you look at it the same way as Gross Margin, you should find great companies.

#### Net Margin

(Revenue + Non-Operating Revenue - Total Costs) / Revenue

Net Margin adds in more costs like taxes and interest payments on debt. Again, the same scenario as above, they vary and by looking at competitors and past trends, you should find great businesses.

#### Return On Assets

Net Profit / Total Assets

Here you are looking for how much money is earned off of the assets of a company – which includes cash, property, machinery, etc. This metric is more company specific, and if you can find business that yield 25%+ that is very good.

#### Return On Equity

Net Profit / Total Equity

ROE shows you how much profit is being yielded from the net worth of the company. This metric can be misleading because if a company his a high amount of debt, the yield will be higher. But if there is little debt, then look for 25%+.

#### Return On Invested Capital

ROIC = (EBIT \* (1 – Tax Rate)) / Invested Capital Invested Capital = (Total Assets – Cash – Tax Accounting – Investments) – Current Liabilities EBIT = Operating Profit

ROIC is a good metric to look at because it tells you how much money is being earned from dollars that is being used specifically to earn money. Again, a rate of 25%+ is very good.

#### Operational Cash Flow

Cash Flow From Operations / Current Liabilities

OCF is an important consideration because it allows you to see if the cash flow a company is generating is enough to pay off its debts. Look for an OCF that is greater than 1.

#### **Book Value Per Share**

Stockholders Equity - Preferred Stock / # of Shares Outstanding

Book Value is an excellent tool to asses a company's intrinsic value to see what it is really worth. You want the Book Value Per Share to be higher than the stock price.

#### Current Ratio

Current Assets / Current Liabilities

The Current Ratio is an indicator of a company's liquidity. A ratio greater than 1 means that the company has more assets than it does liabilities. Anything over 3 is desirable.

#### Payout Ratio

Dividends Per Share / Earnings Per Share

The Payout Ratio shows how a company distributes its earnings. A low payout ratio means the firm is reinvesting profits, while a high payout ratio tells us that earnings are paid out in the form of dividends. If a company has a dividend that is too good to be true, it probably is. Generally, companies with a high yield will have payout ratios greater than 100% - indicating that they are financing it with borrowing. These yields are unsustainable unless the company experiences a significant level of growth.

# Summer Reading List

Following is a list of books on investing that cover various topics and will give you a good base of investing knowledge. This is by no means a complete list, and if you are looking for more information, don't hesitate to email us.



Eutropelia.worldpress.com

### Common Stocks and Uncommon Profits By Philip A. Fisher

"Widely respected and admired, Philip Fisher is among the most influential investors of all time. His investment philosophies, introduced almost forty years ago, are not only studied and applied by today's finance professionals, but are also regarded by many as gospel. He recorded these philosophies in Common Stocks and Uncommon Profits, a book considered invaluable reading when it was first published in 1958, and a must-read today."

Category: Growth and Value

#### How I Made \$2,000,000 In The Stock Market

By Nicolas Darvas

"How did a world-famous dancer with no knowledge of the stock market, or of finance in general, make 2 million dollars in the stock market in 18 months starting with only \$10,000? Darvas is legendary, and with good reason. Find out why." *Category: Technical Analysis* 

#### The Intelligent Investor

By Benjamin Graham

"The classic bestseller by Benjamin Graham, The Intelligent Investor has taught and inspired hundreds of thousands of people worldwide. Since its original publication in 1949, Benjamin Graham's book has remained the most respected guide to investing, due to his timeless philosophy of "value investing", which helps protect investors against the areas of possible substantial error and teaches them to develop long—term strategies with which they will be comfortable down the road."

Category: Value

#### Market Wizards: Interviews with Top Traders

By Jack D. Schwager

"How do the world's top traders make millions of dollars in the markets - sometimes in a matter of only weeks or even days? That's precisely the question Jack Schwager was trying to answer when he interviewed 17 superstar money-makers including Richard Dennis, Paul Tudor Jones, Ed Seykota, Marty Schwartz, Tom Baldwin and others. After reading this best-selling book, you'll know what ingredients enable these top traders to consistently work their financial magic in the markets while so many others walk away losers."

Category: Interviews and Trading

#### Reminiscences of a Stock Operator

by Edwin Lefèvre

"Few investors have made and lost fortunes to equal those of the legendary Jesse Livermore, a notorious stock market speculator during the first half of the 20th century. Enjoy this highly readable, entertaining chronicle of one of history's boldest speculators. Written in 1923 by Edwin Lefevre, this work is cleverly written as a narrative biography. Independent-minded investors today will enjoy and even profit by Lefevre's shrewd, witty book. His observations of human behavior and market trends are as wise and accurate now as they were 75 years ago."

Category: Trends and Biography

## How To Make Money In Stocks: A Winning System in Good Times or Bad

by William J. O'Neil

"From the school of unemotional investing comes the classic How to Make Money in Stocks, by Wall Street analyst and publisher William O'Neil. Readers new to securities will find it an excellent primer, one that relies on time-honored indicators such as quarterly earnings, market capitalization, and daily indexes. O'Neil's study of winning stocks stretches back to the 1960s, and he shares his insights here, describing what characterizes a growth stock, when to cut your losses (at 7 or 8 percent, no more), and how to spot a market top."

Category: Technical Analysis and Momentum