Memo to: Oaktree Clients

From: Howard Marks

Re: A Case in Point

Last month, my memo "There They Go Again" discussed investors' propensity to repeat certain classic mistakes. The biggest of these mistakes stem from some combination of too much enthusiasm, optimism, naiveté and greed and too little realism and skepticism. Although it comes in a wide variety of forms, the bottom line is usually a belief that the "silver bullet" is at hand: a surefire route to wealth without risk.

In recent years we've seen the elevation of one such particular strategy, and in recent months its defrocking. The subject is convertible arbitrage. Its story is worthy of review.

Background on Convertible Arbitrage (Perhaps More Than You Want)

Properly, arbitrage refers to the simultaneous purchase and sale of the same thing, or of two things that are nearly the same, at different prices so as to lock in a small profit on a highly probable basis. I was introduced to this phenomenon in the 1950s by an old movie about the Rothschild brothers, who spread out to five European cities and used information transmitted by carrier pigeon (at a time when there was no telephone or telegraph) to simultaneously buy and sell currencies in those far-flung cities at different exchange rates. Market opportunities are rarely that glaring nowadays, but they do arise from time to time.

Convertible securities are candidates for arbitrage because one asset (a convertible bond or preferred) is exchangeable for another (the underlying common stock). Thus imperfections in this market can create opportunities to simultaneously buy one asset and sell the other, giving rise to frequent small profits with little risk. Of course, the arbitrageur must be skillful enough to identify the opportunities and take advantage of them.

Time for an aside: Many years ago, Ed Thorp, an MIT professor of mathematics, literally "wrote the book" on blackjack. It's called "Beat the Dealer." Thorp used computers to simulate the play of the cards and codify the "basic strategy" that virtually all serious blackjack players use today to decide when to split, double down, hit or stick. Use of the basic strategy can significantly reduce (but not eliminate) the casino's advantage. From quantifying the basic strategy, Thorp went on to formalize the process of card counting. Because blackjack is dealt from a deck or "shoe" without shuffling after every hand, the cards that have been played determine the cards that remain – in statistical terms, the hands aren't "independent." This means if a player can keep track of the cards that have been played, his knowledge of what remains can give him an advantage over the house. Recently the profitable use of card counting was chronicled in the enjoyable book "Bringing Down the House." Card counting was used to such great advantage that casinos fought for, and won, the right to throw out counters.

Of course, when the casinos became able to evict card counters, they went straight for Ed Thorp. Needing a new "gig," Thorp turned his attention to another field in which subjective judgment could be improved upon through computer simulation: convertible arbitrage (I'll bet you were wondering what blackjack had to do with the subject of this memo). Thus Thorp pioneered the conversion from art to science of a second potentially profitable field.

In convertible arbitrage, someone buys a security that can be exchanged for common shares, and he sells short some of those same shares. Let's say a bond is convertible into 40 shares and those shares are selling at $20. Thus the value of the stock underlying the bond (the "conversion value") is $800. The bond usually won't sell at $800, but rather at some higher price.

One reason for this is that the bond embodies an option on that $800 worth of stock (plus the means to pay for it by surrendering the bond). This combination is worth more than $800, because an option provides a way to participate in an asset's upside potential but not its downside. In addition, (a) a US convertible is likely to yield more than its underlying common stock, and (b) being senior to the common stock, it will entail less exposure to credit problems. So the bond may sell at $1,000 when the common stock is $20 and the conversion value is $800. That implies a "conversion premium" of $200, or 25% of the $800 conversion value.

The arbitrageur buys the bond and shorts the stock. If the stock goes up (producing a loss in the short position), he expects the bond to go up almost as much (producing a gain in the "long" position). If he has more money invested in the bond than he does in the short position on the stock, the result can be reasonably attractive. If the stock goes down (producing a gain in the short position), he expects the bond – buoyed by the income and the promise of redemption at maturity – to go down substantially less (producing a smaller loss in the long position), for an overall result that is very positive. The arbitrageur hopes for a reasonable mix of appreciating stocks (with decent results on the arb positions) and declining stocks (with highly attractive results), and he has the ability to use leverage to magnify this steady flow of modest profits. In addition, he receives more income on the converts he owns than he owes on the stock he's short. It's hoped that the above elements will combine to produce a consistently positive return.

Obviously, the open question is how many shares to short in order to create the desired performance pattern. Because the relationship between the market price of the convertible and the market price of the shares isn't constant, figuring out how much stock to short against a given bond purchase – the "hedge ratio" – has its vagaries.

Generally, a properly priced convertible will capture a certain percentage of the underlying stock's gains and a somewhat smaller percentage of its losses. That means the percentage of the stock's price movement captured by the bond is variable, rendering imprecise the proper number of shares to short per $1,000 bond. And that number usually is less than the number of shares into which the bond is convertible. This is because convertible bonds are less volatile than the underlying shares, and the arbitrageur wants both sides of the position to be equally volatile. Thus he won't short the full number of shares the bond is convertible into.

There's no one "right" answer regarding the hedge ratio. Setting it entails estimation regarding the future volatility of the common stock among other things. Thorp's methodology helped him to profitably determine hedge ratios.

The Backdrop

As the interest in hedge funds rose over the last ten years, "convert arb" became the model of an absolute return strategy. It seemed capable of grinding out returns in the teens almost every year. This occurred without significant exposure to market fluctuations, because every position was hedged.

The table below shows the 1995-2003 returns for the market-weighted index of convertible arbitrage funds in the CSFB/Tremont Arbitrage Index.

Year	Annual Return	3-Year Return	5-Year Return	9-Year Return
1995	16.6%			
1996	17.9			
1997	14.5	16.3%		
1998	-4.4	8.9		
1999	16.0	8.3	11.8%	
2000	25.6	11.7	13.5	
2001	14.6	18.6	12.8	
2002	4.0	14.4	10.7	
2003	12.9	10.4	14.4	12.8%

12.8% per year for nine years. Only one down year in nine, and that a loss of just 4.4%. No three-year period with an annualized return worse than 8.3%. No five-year period not in double digits. **What a record!!**

Rule Number One: Money Matters

So what happens? **Money floods in.** Whereas a few smart people had been able to churn out consistently good results with small amounts of capital, now a crowd was fighting over the convert arb ideas, armed with much more money. Increased pursuit of a strategy is sure to drive down prospective returns. If in a less crowded period the process of convertible arbitrage appeared capable of producing an inherent return in the low double digits (or maybe LIBOR plus 5%), it should be expected to produce less after others have flocked to it.

In addition, I feel arbitrage and many other hedge fund activities are best thought of as "piggybacking" strategies, living off some underlying process that has a life of its own (see the big fish/little fish analogy in "Hedge Funds: A Case For Caution"). What I mean is that as long as thousands of investors are setting the prices in the convertible bond and stock markets

through their buying and selling, a few dozen astute arbitrageurs can dart in on occasion to take advantage of their mistakes. But what if the arbitrageurs come to outnumber the "long-only" convert investors, so that their buying power directly affects (in this case, raises) the prices of convertibles relative to the underlying stocks. That can change the game, and thus the dependability and profitability of convertible arbitrage. This was certainly the case in 2004, when at times 80% of all convertible buying was thought to be from arbitrageurs. They didn't care as much as the long-only crowd about the issuers and the price attractiveness of the underlying securities; rather, they would buy almost anything to put on an arb position.

When I organized Citibank's first convertible fund in 1978, convertibles found few regular buyers and were considered a somewhat disreputable market of last resort for corporate financing. This level of disregard permitted convertible prices to languish. Most of the time I felt the convertibles I bought were considerably cheaper than a corresponding package of more efficiently priced bond plus stock from the same company.

For the next two decades, the same cheapness that had given our portfolios risk-adjusted returns better than stocks made it possible for convert arbitrageurs to buy underpriced convertibles and short fully priced common stocks. This was a formula for steady profits. But if money floods in such that bargains become less widespread among convertibles, it seems reasonable to suspect that convertible arbitrage will become less profitable.

In 2004, the return on the CSFB/Tremont convertible arbitrage index subsided to 2.0%. For the first four months of 2005, it was negative 5.8%. April was the fifth worst month out of the last 136. The index declined in only 14 of the 108 months from 1995 through 2003, but in 9 of the 12 months through April. January, February, March and April were all negative, the first time there have ever been four down months in a row. And May was the fifth – down almost 2% more. What changed? Mostly, I think, the amount of money being managed in the sector.

Bottom line: the returns available from an investment strategy are not independent of the amount of money seeking to be deployed in that strategy. **More simply put: everything else being equal, more money means lower returns**. This seems elementary, but it appears to be ignored every time something does well for a while. I repeat for the umpteenth time: what the wise man does in the beginning, the fool does in the end.

Rule Number Two: There's No Sure Thing

If there's a "kiss of death" in the investment world, it's widespread belief that something can't miss. When people have complete confidence in something, the prices they'll pay for it and the amounts of money they'll try to jam into it will sound an absolute death knell for its profitability. I've seen it in the nifty-fifty stocks, in oil stocks in the post-embargo 1970s, in disc drive companies, in portfolio insurance, in tech stocks and in venture capital.

In recent years, buying convertibles and shorting the underlying common shares came to be accepted as a surefire technique. And what could be better than having a long position in the senior securities of a company heading for trouble and a corresponding short position in its

common stock, with the likelihood that the stock would decline precipitously: no bet on the direction of the market or the company, and absolute preparedness for negative developments. That's the position the arbs flocked to this year in General Motors. They assumed the debt they were long would hold up much better than the common they were short. What could go wrong?

Well, something can always go wrong, and things are most dangerous when people agree they can't (and price them accordingly). In the case of GM, the arbs got a double whammy:

- Billionaire Kirk Kerkorian stunned the financial world on May 4 by announcing his intention to bid $31 for 28 million shares of GM common stock. This drove the price of the stock from roughly $28 to $32, creating big losses on the arbs'short positions.

- Just the next day, S&P announced its long-expected downgrading of GM's credit rating. This lowered the price of GM debt, giving the arbs losses on their long positions as well.

In this way, something that "couldn't happen" did: the prices of both assets went against the arbs simultaneously. If a company's bonds decline because of deteriorating creditworthiness, can the stock possibly do better? It did this time – for a reason no one would have anticipated. (People are still mystified regarding Kerkorian's motivation.) I don't think a company's stock can do well for long if its bonds don't (given the implication of serious fundamental problems). **But the long run doesn't matter when unexpected difficulties arise in leveraged portfolios. The effect on staying power can be very negative.**

Other things we've seen recently that "couldn't happen": GM and GMAC being downgraded simultaneously, and intermediate and long rates down substantially while short rates rose more than 200 basis points.

As Long-Term Capital Management said in explaining its meltdown, "the convergence trades diverged." In this case, I absolutely am not saying the arbs were foolhardy in putting on their GM positions. I simply want to point out that nothing in the investment world can be counted on to work 100% of the time. Allowance must always be made for the unexpected.

Rule Number Three: Piling In Is Dangerous

One of the phenomena we've witnessed lately – and it was particularly pronounced in the events surrounding Long-Term Capital Management – is the tendency of funds of a given type to flock to the same situations. The General Motors trade described above, for example, was particularly common among arbs. Thus, when it went wrong, they all suffered losses, and they all faced illiquidity when they went to unwind it.

There's little mystery surrounding the reason particular trades become widespread. These days, computers are used universally – especially in the more quantitative fields – to screen for investment opportunities and model their profit potential. Not surprisingly, since they all sift through the same universes and evaluate profitability similarly, they often highlight the same investment opportunities. When everyone tries to pile in, that raises the cost of implementing

the strategy and thus lowers the prospective return. And when everyone wants to get out, that's costlier too. This is an example of the way in which too many piggybackers – with the same ideas – can overwhelm the underlying markets.

Rule Number Four: A "Virtuous Cycle" Can Turn Vicious

There is a predictable cyclical pattern in these matters, and now we've seen it in convertible arbitrage:

- In the years leading up to 2004, convertibles were available "too cheap," and so arbitrage consistently produced high returns with low risk.
- The results were very attractive, drawing in capital.
- The new capital drove up prices, enhancing returns on existing positions.
- These returns attracted still more capital in a so-called "virtuous cycle."
- When too much money came in, bargains became scarcer, causing the free lunch to be removed. Also, convert arb money altered the terms on new convertible issuance, reflecting the arbitrageurs' preference for call protection over yield.
- Positions put on in the new environment didn't do as well as the old ones.
- Investors' faith weakened in 2004 and largely evaporated in April/May 2005.
- Withdrawals set in for real: $1.7 billion in the fourth quarter of 2004 and $1.8 billion in the first quarter of 2005.
- The withdrawals caused forced selling, and the selling drove down prices, exacerbating the losses – and causing more loss of faith and thus more withdrawals and more forced selling.
- Now we think convertibles are getting cheap again, and we're considering increasing our allocation to them in our discretionary accounts.

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It has always been thus, and it always will. Excessive confidence sets the stage for disappointment, and the loss of confidence creates bargains. It's the job of all investors to maintain their equanimity, buying in panics and selling in bubbles. **That'll be the day!**

Convertible arbitrage isn't "over." The possibility of its application will always exist . . . but the assurance of high returns with low risk will not. They'll only be available when the amounts of money pursuing the strategy are reasonable, so that practitioners can be patient and selective and pick from an attractively priced universe. **And in that way convertible arbitrage isn't any different from any other investment technique.** Anyway, this isn't a memo about convertible arbitrage, but about investors' persistent mistakes. Convertible arbitrage is just a case in point.

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