

Speculating with Stock Options

Options provide a way to benefit quickly from an investment idea or insight. Compared to outright purchase of stock, buying a call option gives you leverage and limited risk. A small investment in options buys the near-term profit potential of a large amount of stock.

Sometimes you might see a product you believe will be successful. Buying stock in the company is a sensible way to take a personal stake in your belief. Similarly, you might have a hunch about how something is going to play out in the world. It might be a business development, a political event, or economic trend.

Each year brings opportunities. 2005 brought Razor phones, I-Pods, X-boxes, Vioxx trials, war protests, \$500 gold, and the return of Martha Stewart. These happenings often provide the basis for peoples' decisions about stock investments.

For example, consider the oil stocks. The year 2005 was an exciting one in the oil business, with surging demand in China, hurricanes, refinery shutdowns, supply disruptions, and record high prices, all having big impact on the industry. Oil stocks had a good year, with swings up and down around an upward trend. Investors bought and sold oil-related commodities and stocks based on their insights and hunches about prices and the industry.

Options provide another way to "play your hunches" on products, companies, or trends.

Speculation Alternatives

Suppose you believe that BP stock is going up in the near term. If you want to buy 300 shares of BP stock at \$63.30 per share, it will cost you \$19,000.

As an alternative, you could buy six 7-month BP call options for \$2,400 and invest the other \$16,600 in a money market fund. In the near term, these two investments will give you about the same dollar profit potential, per dollar change in BP stock.

To see this, look at the option pricing data in Table 1 and Figure 1 for BP call options, with BP stock at \$63.30, on December 30, 2005:

Table 1. BP call option prices on December 30, 2005

	BP July calls (7-month life)	BP April calls (4-month life)	BP January calls (1 month life)
stock price>>	\$63.30	\$63.30	\$63.30
exercise price	<i>Purchase price of call options</i>		
60	\$6.10	\$5.10	\$3.90
65	\$3.40	\$2.25	\$0.65
70	\$1.60	\$0.75	\$0.10

Figure 1: Option pricing chart for BP January call options

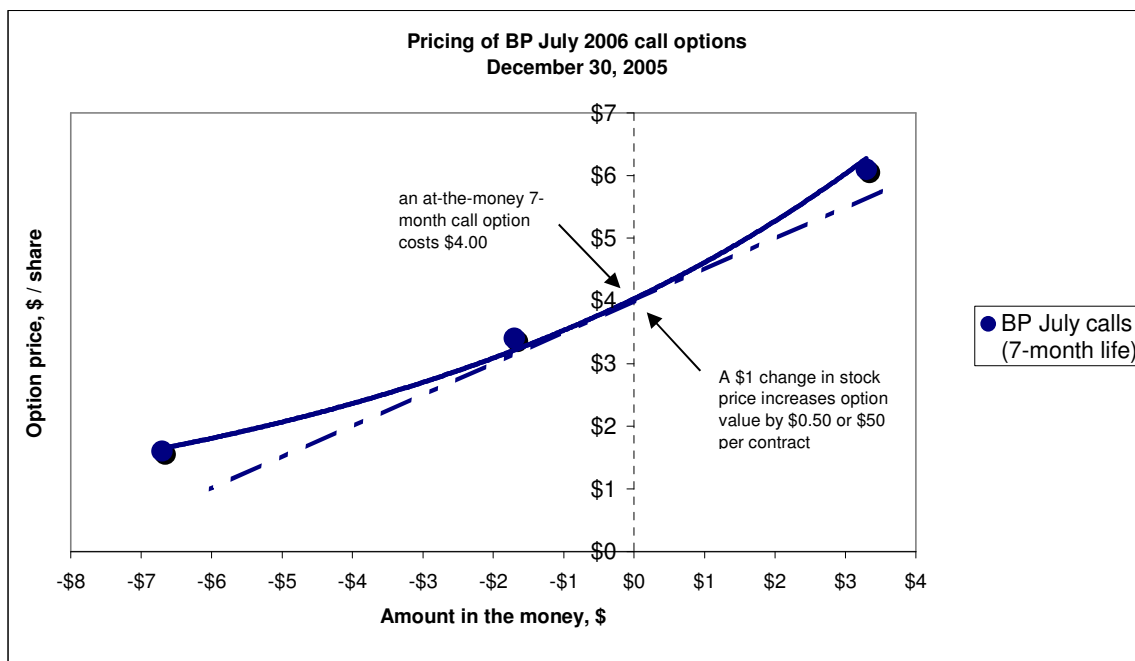


Figure 1 shows the prices of the July BP call options charted in terms of the amount they are in the money. It is easy to make these charts from the option price data in Table 1. Just calculate the amount each option is in the money and use that for the horizontal axis.

This chart is convenient for analyzing the pricing of the BP call options. (refer to my previous articles, especially “ Bargain Hunting in Options, Active Trader, January 2005). The point where the option price curve crosses the vertical-axis is the *implied price of an at-the-money call option*. This is a useful indicator of the pricing of the 7-month BP options. In this case it is \$4/share. The dashed line represents the slope of the option price curve for an at-the-money option. The slope is 50 cents change in option price per \$1 change in BP stock.

If you want an option position that gives the same near-term profit sensitivity as 300 shares of BP stock, you must buy 6 of these option contracts. With six contracts, a dollar increase in BP stock will bring \$300 profit (6 contracts times \$50 per contract), the same as 300 shares of BP stock.

Table 2 compares the two alternative investments:

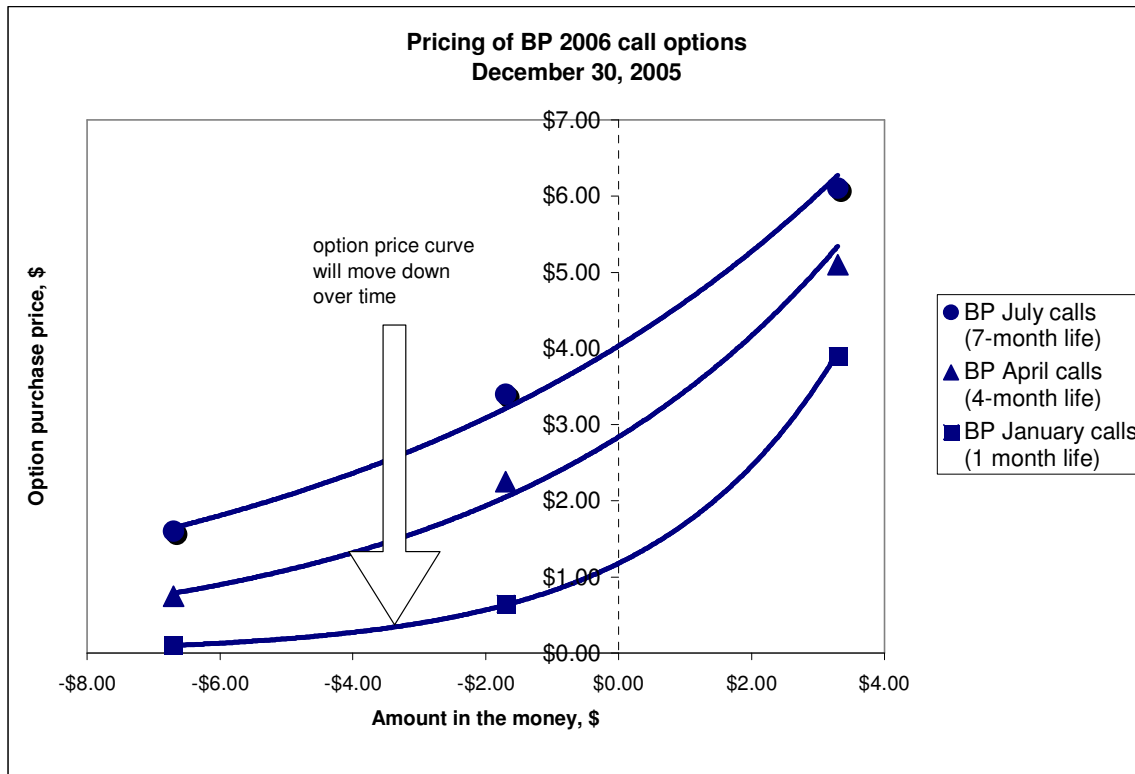
	300 shares of BP stock	6 at-the-money BP call options (7-month life)
Cost of stock	\$19,000	
Cost of options		\$2,400
Cash held		\$16,600
Total	\$19,000	\$19,000

The option investment gives the same dollar profit potential for a much smaller investment, and much less at risk. There are, of course, other important differences between these two investments:

- The stock pays dividends, the options do not.
- Unless the stock goes up, and soon, the options will decline in value over time, and expire worthless in 7 months.

You can estimate how the option price will decline over time by plotting the January and April option data on the option price chart, as in Figure 2:

Figure 2: Option pricing curves for BP call options



As time goes on, the option price curve of the July calls will fall. Three months from now, the July price curve will resemble what the April calls look like today.

Stock or options?

Which of these two alternative investments is a better way to “play a hunch” on BP?

In many ways, the option route is better. The higher leverage and limited risk are attractive for the purpose of speculating on near-term events or trends. You can take a significant stake in a near-term outcome with a smaller investment and limited risk. The cash reserve is excellent defense against being wrong. Your bet will play out to a final conclusion in a matter of months. And when you want to play a different hunch, you still have \$16,600 of free cash to use.

If instead you were interested in a long-term investment in BP stock for dividend income and growth, you would prefer the stock.

Sensible speculation

Here is a project you could start, to try your hand at speculating with options. It is easily done in your spare time and gives significant profit potential and controlled risk.

You will open an options trading account with \$20,000 cash. Over the next year, you will make a series of investments in long option positions. Every month you will buy one to five new long option positions, each about 5% of your account value.

The options will have expiration dates four to eight months out when purchased. Set a profit target for each option, and hold each one until it either hits its target or expires.

Always keep a cash reserve around 50% of the total account value.

You will gradually accumulate a portfolio of options with expirations spread out over the next eight months. Some of these options will hit their targets, others will decline in value and eventually expire worthless. Those that hit their profit target will generate revenue which goes back into the cash reserve to finance your ongoing purchases.

The cash reserve is important to control risk. It is a stockpile to carry you through cold streaks. When you are buying options that expire in a matter of months, the value of your portfolio can swing widely on a percentage basis. The cash reserve cushions these swings. It also provide seed corn so you can keep buying new options steadily, every month, even through slumps when there is no revenue coming in.

The value of this option/cash account represents the cumulative outcome of your speculative bets over time. If you are good at playing hunches on stocks, your account value will increase and you will start buying and selling more investments each month. If you are not good at playing hunches, your account balance and trading activity will decline and you will have to re-assess your strategy.

Trading Example

Figure 3 Outcome of speculation in equity call options, 2004

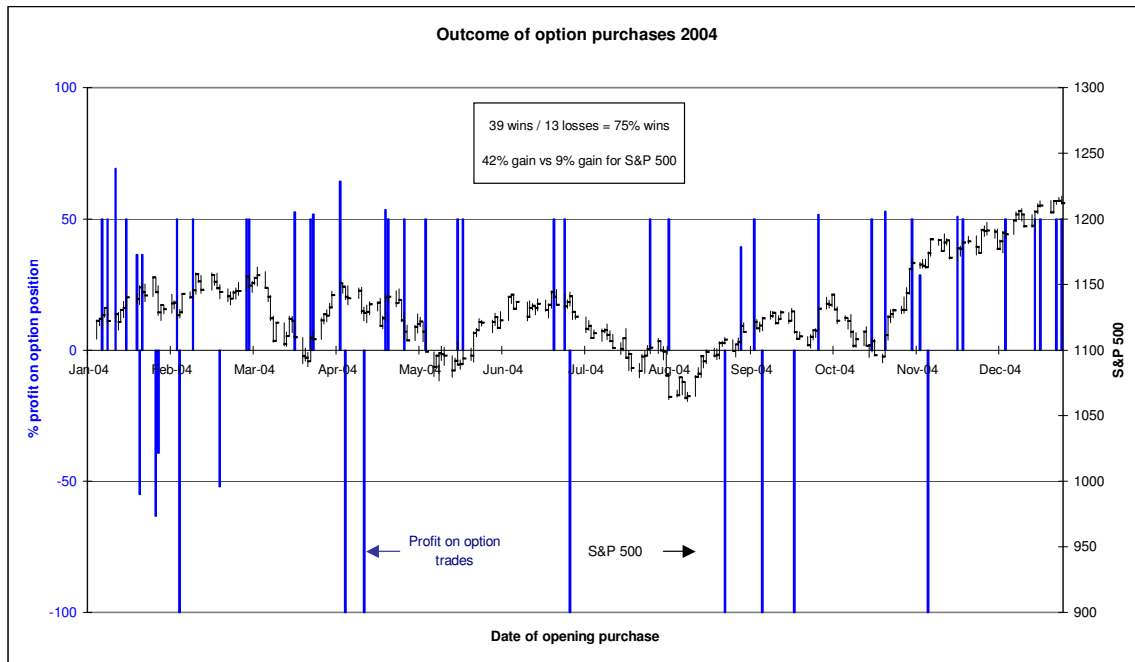


Figure 3 shows the outcome of such a program carried out during 2004. This chart has two vertical axes. The right vertical axis shows the S&P 500, which started the year at 1112, and ended the year at 1212. The left vertical axis and blue bars show the outcome of the individual option trades. Each trade is represented by a blue bar showing the eventual outcome of that trade as a percentage gain or loss. Each bar is positioned on the day that option was *purchased*.

In this program, every option was a call option of about 7 months duration. Every position was long the call, and the target profit for every position was 50% of the purchase price. The call options were a broad mix of equity options selected by analyzing stock price volatility for all listed stock options, once each month.

Most of the blue bars on Figure 3 show 50% profits. These represent options that hit their profit goal and were then sold immediately, usually by triggering a good-till cancelled limit order. The downward pointing bars represent losing options. The losers either expired worthless or were sold for salvage value during expiration week.

There were 52 purchases in 2004. Thirty-nine of them were winners, and 13 were losers, for a winning percentage of 75%.

Figure 4 Cumulative percentage profit in 2004, option/cash account vs. S&P 500

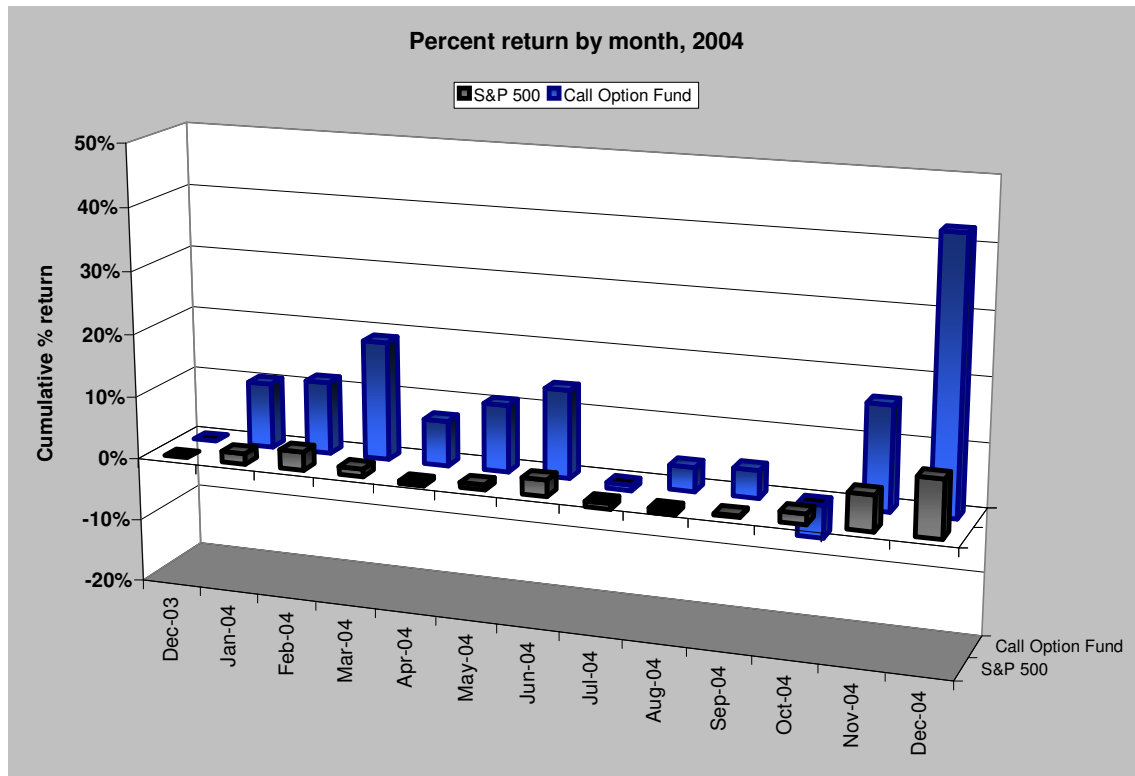


Figure 4 shows the cumulative percentage gain for this call option account and the S&P 500 in 2004. Because all of the option positions were long calls (bullish), there is a directional correlation. The S&P 500 varied over a range of +/-5% for the first three quarters, and then made a 9% jump in the fourth quarter. The call option account showed a similar pattern, with an early 20% gain, then falling to a 5% loss in October before gaining strongly with the year-end stock rally.

Referring back to Figure 3, you see that most of the options bought after April 15 eventually delivered 50% profit. Several of these options were January, February, or March options that initially decayed in value but were rescued by the 4th quarter market rally, shortly before they were to expire. The fourth quarter rally was enough to leverage many of the options to 50% profits, which explains the late jump to a 42% gain for the year.

Some questions about this approach

Shouldn't I use stop-loss orders instead of letting losers expire?

No. In effect, a stop loss is set at the beginning by restricting each trade to a long option position of about 5% of your account value. That is your maximum risk on each position. You don't need both.

But it seems irresponsible to allow 100% losses. Isn't it prudent to sell a loser before it gets that bad?

By the time you know it's a loser, there won't be much left to sell. Your trading guidelines limit your risk on each trade to 5% of your pot. Instead of fretting over how to sell losers, focus your attention on finding a strategy to buy winners.

What if I get impulsive and put 25% into one position?

This is not a good project for an impulsive, undisciplined person. If you put even as much as 10%, into one position, then you are engaging in a very different speculation project than the one described here. The same is true about letting your cash reserve run too low.

Doesn't an options portfolio require a lot of time and continuous attention to watch over it and react to what is happening in real time?

Not when you are already controlling risk with position size limits and a cash reserve. The project described here requires no more attention than a typical hobby. If you follow the guidelines, an occasional weekend is enough, and 90% of that time should go toward searching for options to buy. The rest is on autopilot.

Can I do this with single stock futures instead of options?

Not in the same way, because futures don't have the limited risk feature of options.

What kind of options should I buy?

This is for you to decide. It is the heart of your strategy, and what will determine your success. Do you really have insights that will allow you to beat the market? This is a way to find out while keeping score with real money.

What if I am bearish on a stock?

Then buy puts. Shorting options, whether puts or calls, doesn't fit with this particular program.

Why buy options with 4-8 months remaining life?

Often, peoples' speculative ideas about stocks or market events pertain to current or near future events. Options of 4-8 months duration give you leverage over this time horizon, and will play out to a final conclusion in that time frame. If you are speculating on a very near term event, a 4-8 month option will still give you plenty of leverage to benefit if you are right.

What if I don't have \$20,000 to risk on a speculation project like this?

Then neither should you risk \$20,000 in a speculative bet on a single stock.

Is it wise for me to be speculating at all?

This is certainly for you to decide.

George Hoekstra
December 31, 2005

Most investors want to test their speculative instincts. It is part of the appeal of investing. But speculating, whether in individual stocks or options, is not long term investing. The two are often confused.

A cash/options side project like this can be a good way to satisfy the urge. It will test your speculative bent in a way that doesn't interfere with your long-term investments. It will test your trading strategy, patience, and discipline. It can be easily implemented with minimum attention required from you. And if your speculative instincts are good, it should make you some money.