

The Essence of Intelligent Option Investing

One of the wonderful things about options is their great flexibility. For a stock investor to enjoy a gain from an increase in the price of a stock, he or she must buy the stock and accept the risk that the stock price might fall.

We can picture the risk and reward exposure of an investor who buys a stock in the following way:

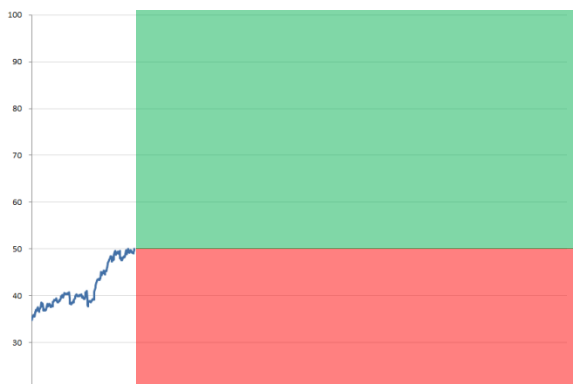


Figure 1

The blue line in figure 1 represents a stock's historic price movement. Here, we are assuming that an investor buys a stock at the current price—\$50 per share in this case—and must accept exposure to the stock's downside risk in order to gain exposure to the stock's upside potential. The shaded regions are what we call **ranges of exposure**. A stock investor is always

exposed to both upside and downside ranges of exposure.

In contrast, an option investor has the flexibility of separating a stock's upside potential from its downside risk.

This means an option investor can pick and choose precisely the exposure he or she wants to gain or accept.

For instance, an option investor might choose to gain exposure to a range starting at the \$60 mark—\$10 above the stock's present price—for a period of two years:

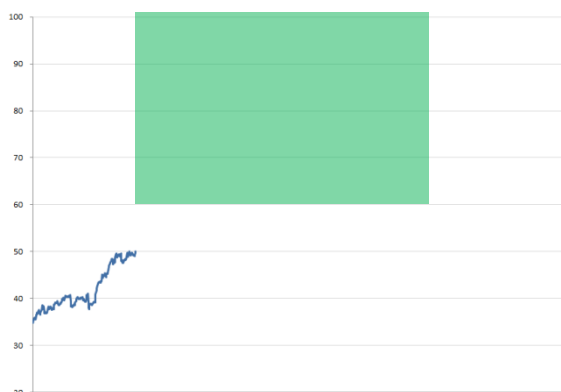


Figure 2

In order to gain exposure to the directionality of a stock, an investor must pay an up-front fee, called a **premium**.

An option investor might also choose to accept exposure to a stock's directionality. For example, one might accept exposure under a price of \$40 per share for a period of six months:

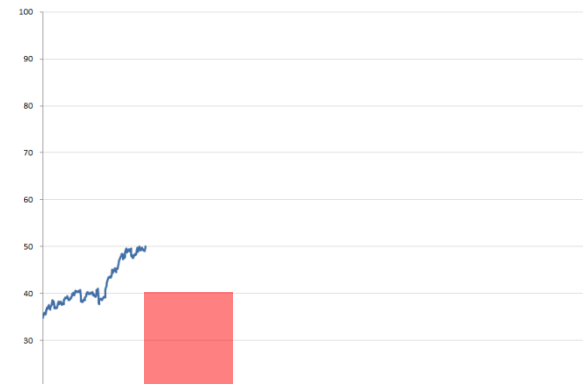


Figure 3

When an investor agrees to accept exposure, he or she receives premium. The amount of the premium paid or received varies due to market factors. These factors are discussed fully in [The Intelligent Option Investor](#).

Looking at these images, the wonderful **flexibility** of options comes through loud and clear, as does their inherent **directionality**. These are two of the reasons that make options such attractive investment tools for value investors.

The Essence of Intelligent Option Investing

Value investors know that stock prices reflect the economic value that the companies underlying the stock will create for its owners over time.

[The Intelligent Option Investor](#) lays out a sound intellectual framework for estimating a company's value. Given the great complexity of economies and large companies, we recommend conceiving of and calculating a company's value as a range rather than a single-point estimate. This range is based on best- and worst- case estimates of three fundamental drivers of value.



Figure 4

When the both the upper and lower boundaries of the valuation range (represented by a triangle and a square, respectively) are well above the present

price of a stock, as in figure 4, an investor has a chance to invest profitably with relatively low risk. This investment is sometimes said to have a wide **margin of safety**.

As the valuation range gets closer to the present price of the stock, the margin of safety of the investment shrinks, making the risk / reward equation tilt more toward the risk side.

Sometimes, the valuation range can be very wide, as is shown in figure 5.



Figure 5

In cases like this, when the lower boundary of the valuation range lies below, and the upper boundary of the valuation range lies above the present stock price, a stock investor must decide if he or she wants to

accept the risk of loss in order to gain access to the stock's upside potential.

However, thanks to the flexibility inherent in options, an intelligent option investor can gain exposure to both downside and upside potential:

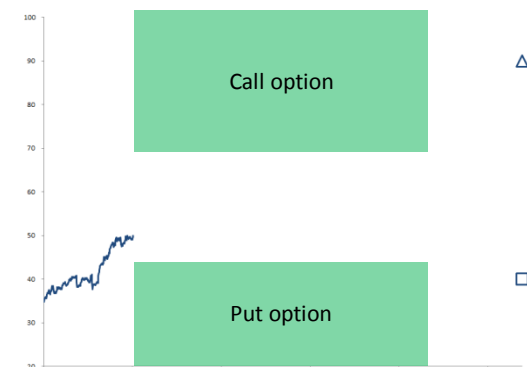


Figure 6

Figure 6 shows an investment colorfully called a "straddle," in which an option investor gains exposure to both downside and upside potential by buying a put option and a call option, respectively.

This may or may not be a sensible strategy, depending on the price of the two options. Paying too much for flexibility is as bad as not having the flexibility in the first place.

Clearly, we need to develop a sense for what is a good price for an option.

The Essence of Intelligent Option Investing

Prices of options are determined using mathematical models. The first and most influential of these was developed by three academics--Fisher Black, Myron Scholes, and Robert Merton—and is called the Black-Scholes-Merton model (BSM).

The BSM is used to determine option prices, but at its heart is a prediction of the future price range of a stock.

You can learn more about how the BSM's prediction process works by reading [The Intelligent Option Investor](#), but in brief, the BSM formulas always generates predictions that conform to the same sort of cone-shaped region:

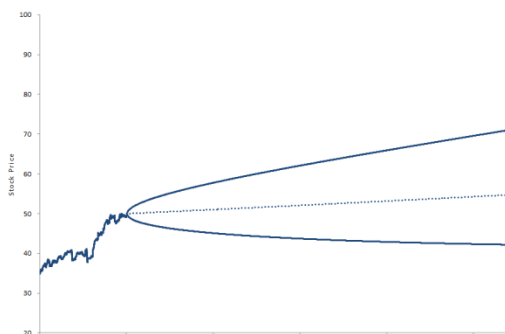


Figure 7

The BSM cone in figure 7 shows what the BSM considers the most likely future price

of this stock to be around \$55 (shown by the lighter straight line) and predicts that the price will most likely be between about \$42 and \$71 (shown by the lower and upper lines of the cone, respectively).

Once the equation calculates this cone, finding a price for an option is easy.

The greater the area of the range of exposure is contained within the BSM cone, the more expensive the option. For example, the option with a range of exposure shown in figure 8...

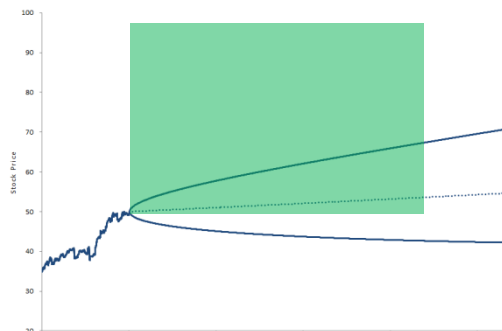


Figure 8

...will be more expensive than the option in figure 9. This is simply because the area of the range of exposure within the BSM cone in figure 8 is greater than the area of the range of exposure lying with the BSM cone in figure 9.

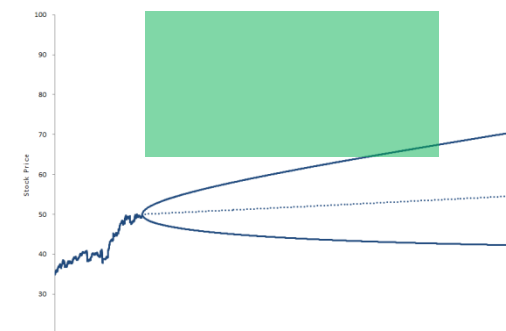


Figure 9

Now that we understand the basic principles behind option pricing, the question still remains as to whether the options are fairly priced or not. To answer that question, we need to compare our fundamental valuation range to the BSM cone's prediction range.

Again, there is a simple rule to follow. We just need to compare our best and worst-case valuations to the upper and lower part of the BSM cone.

This is the essence of **Intelligent Option Investing**.

The Essence of Intelligent Option Investing

The essence of intelligent option investing involves three steps. The first is understanding the value of a company and its stock. The second is comparing this value to the prediction made by the option market. The third is picking an option strategy that will tilt the balance of risk and reward in the intelligent investor's favor.

Graphically, the first two steps can be represented as in figure 10:

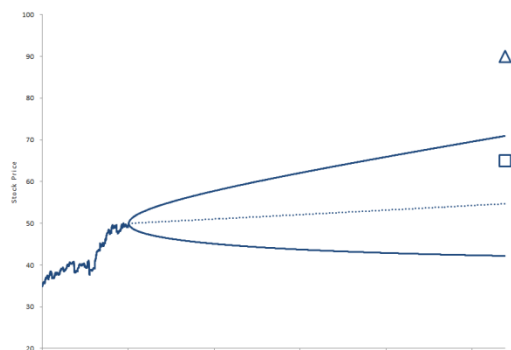


Figure 10

We have used a sound theoretical framework to find a best-case value of \$90 per share and a worst case value of \$65 per share. That is shown in figure 10 by the triangle and square, respectively.

Next, we read the option pricing screens and found that the BSM's prediction for the

price of this same stock ranged between around \$71 and \$42, respectively.

Because our best-case valuation is much higher than the BSM's high-side prediction, we know that call options (which allow an investor exposure to a stock's upside potential) is undervalued.

Conversely, because our worst-case valuation is much higher than the BSM's low-side prediction, we know that the put options (which allow an investor exposure to a stock's downside potential) is overvalued.

And any value investor knows that it is best to buy something that is undervalued and sell something that is overvalued. This means, we should sell a range of exposure to the downside and buy a range of exposure to the upside.

Indeed, this is the third step of intelligent option investing and in this case, it can be represented like this:

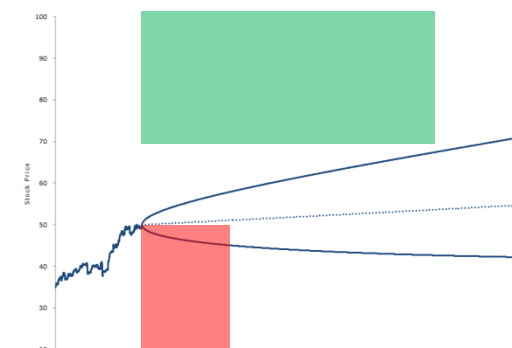


Figure 11

The above option investment, which we call a "Diagonal" in [The Intelligent Option Investor](#), allows for an extremely low-cost way to invest in the upside potential of a company.

In our book, we go into more detail regarding how to choose the right option for a given situation, how to effectively combine option and stock positions for maximum benefit and minimum risk, and how to measure and manage leverage in a portfolio containing stocks, options, and cash.

With this explanation, though, you have a taste of what it means to be an intelligent option investor!