

Probability Filter

Why is probability important? Simple! Option trading is different from trading the underlying. When you're Buying/Selling stock there is usually a 50% probability that the stock will either go Up or go Down. Option trading is a completely different ball game. You can build an option strategy that has probability in your favor. Typically you execute an option strategy only if it has a 70% or more probability of success. This gives you a statistical advantage. When you require a statistical advantage for every trade, you are operating a business; it's like being an insurance company, where you decide who you want to insure and at what price.

Most professional traders incorporate probability analysis in their trading by using special tools that calculate probability based on generic formulas. **Ez Trade Builder takes Probability analysis one step further.** It does not use a "one size fits all" generic theoretical formula. It takes into consideration the specificity of each individual stock and tailors the probability calculation of an option strategy to the **real historical behavior of the stock.**

There are three types of probability we will be using as we move forward and I think it would be a good idea to give a brief definition of each. You may also want to refer back to this section should need be:

1. **Generic Theoretical Probability** uses a "one size fits all" formula to calculate probability for different underlyings.
2. **Ez Trade calculated real Historical Probability** takes into consideration the specificity of each underlyings historical behavior.
3. **Stress Test Probability** uses our proprietary method of calculating probability.

A more in-depth analysis of these probabilities can be found in our educational videos.

The following is an example of how Ez Trade Builder helps you avoid the pitfalls of generic probability analysis.

In the screen capture below one can see Put Credit Spreads that **Ez Trade Builder** created on July 26, 2011 for Panera Bread Co. (PNRA) based on selected filtering criteria.



Trade	Price	Credit	ROI	Break Even %
Sell Sep. 120.0 Put and Buy Sep. 115.0 Put	129.28	0.8	19.05	7.8
Sell Sep. 120.0 Put and Buy Sep. 110.0 Put	129.28	1.45	16.96	8.3
Sell Aug 120.0 Put and Buy Aug 115.0 Put	129.28	0.7	16.28	7.72
Sell Sep. 120.0 Put and Buy Sep. 105.0 Put	129.28	2.0	15.38	8.73
Sell Aug 120.0 Put and Buy Aug 110.0 Put	129.28	1.15	12.99	8.07

Let's assume that the following trade to Sell the September 120 Put and to Buy the September 115 Put was selected.

To get more in-depth analysis and understanding of probability of success for this trade let's take a look at the generic Theoretical Probabilities vs. the Ez Trade calculated Historical Probabilities chart that is available in **Ez Trade Builder.**

The red line represents the generic Theoretically calculated probability using the standard Bell curve distribution. The green line is the Ez Trade calculated real Historical distribution for Panera Bread Co. using one year of historical data.

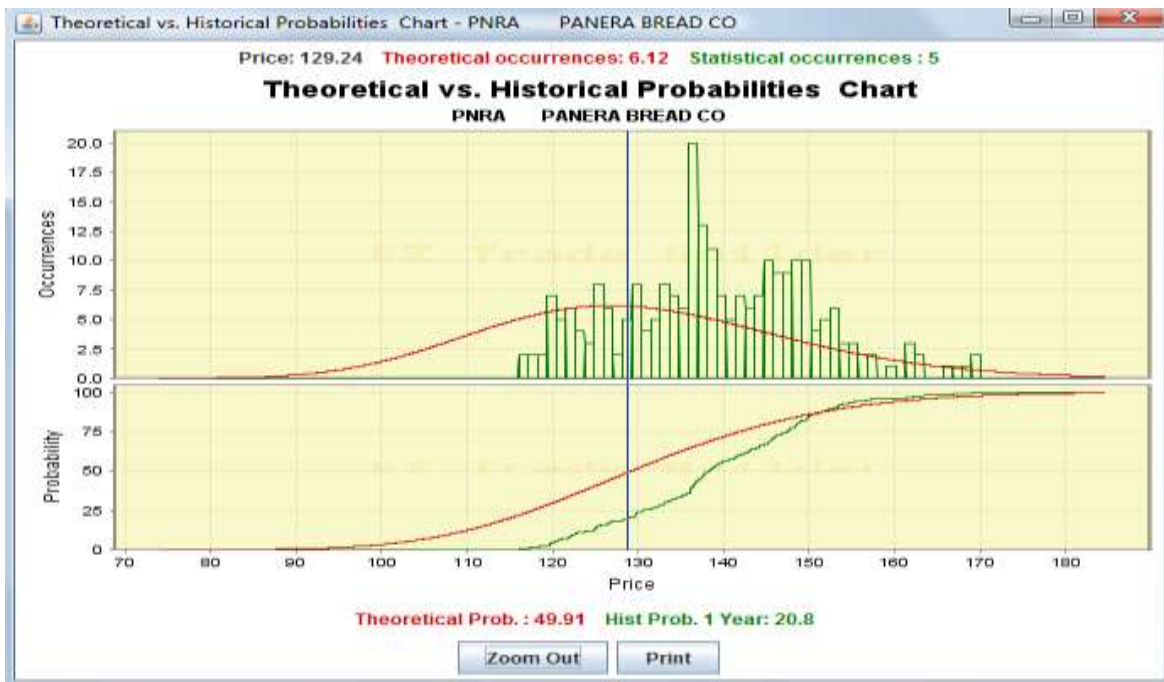
As one can see from the screen capture below the generic Theoretical probability of this stock to finish below \$129.24 on September expiration is 49.91%. At the same time the Ez Trade calculated real Historical probability is only 20.8%.

What a huge difference, here's why!

For the year prior to July 26, 2011 the stock was in a strong up trend, almost straight up. The green bars in the screen capture below represent the historical statistical distribution of this strong up trend in the previous year.

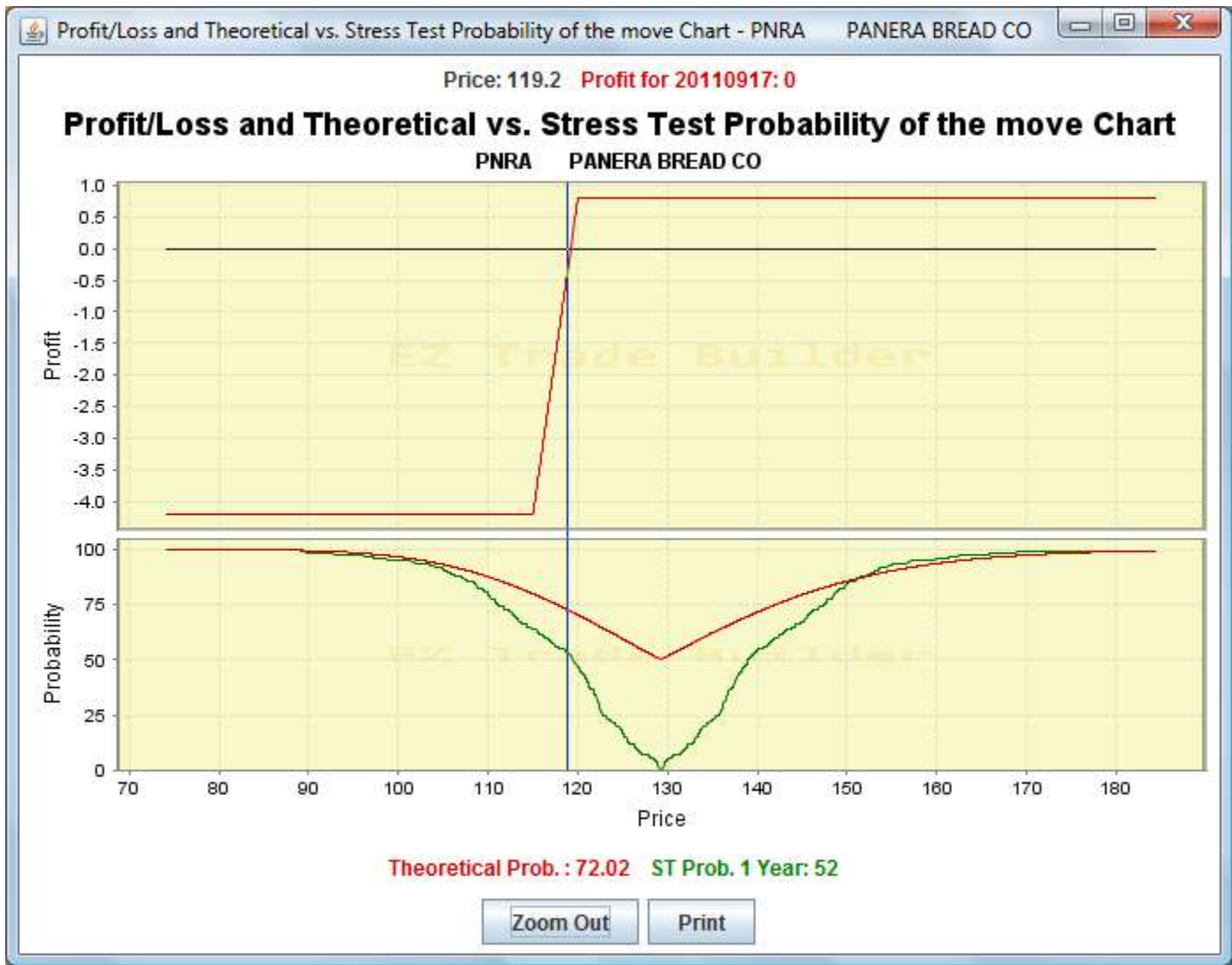
The red bell curve shaped generic Theoretical distribution gives near equal probabilities of the stock going up or down by the same amount. This was clearly not the case. Had you used the generic Theoretical distribution to make probability based trading decisions during this period you would have had a very difficult time!

That is why taking into consideration the specificity of the stock behavior, by using the Ez Trade calculated real Historical probability, is so important!



To take advantage of Probability trading Ez Trade Builder uses a proprietary method of calculating the real probability of success for option trades.

Profit/Loss and generic Theoretical vs. Stress Test Probability on the Move chart above, allows visualization of this probability.



As can be seen from the chart the generic Theoretical Probability of our trade to be profitable is 72.02%, our Breakeven point is \$119.2, which is 7.8% below current price of the stock \$129.28.

To calculate Stress Test Probability **Ez Trade Builder** takes into consideration the **magnitude of the stock moves and not a direction**, as was shown in the generic Theoretical vs. Ez Trade Historical Probabilities chart.

The reason for this is that we do not want to consider the direction of a stocks future move. We only want to analyze how capable a stock is to move beyond the breakeven price point.

According to the Stress Test Probability there is only a 52% chance that this trade would be profitable. What this means is that even though the stock was trending up for the last year; it is still capable of big moves. If this stock makes the big move it is capable of, but against us then we could end up on the wrong side of a trade.

This is exactly what happened to our initial Panera put credit spread we chose to analyze. The initial Ez Trade Builder Estimated Profit/Loss (Est. P/L 1250) of this trade was a LOSS of \$0.86.

A Very powerful feature of the Ez Trade Builder is the ability to back test your trades.

Let's use this capability and view our trade day-by-day from inception until expiration. As can be seen from the chart we were right. The stock returns to the larger moves in the opposite direction as Ez Trade Probability anticipated and the magnitude of the move was big enough to turn our trade into negative territory.



To conclude the presentation of Probability based trading the **Ez Trade Builder** development team would like to present the results of the statistical analysis of over 2 million option trades from January 2006 through January 2012.

By taking trades only when the value of Ez Trade EHR Probability or Expected Profit/Loss is greater than correlated generic Theoretical value one can improve:

- Probability of winning trades by 5 points
- Average profit of a trade by \$0.21

That is a substantial competitive advantage that Ez Trade Builder could offer!

For more in-depth coverage please check information on our on-line Webinars or Mentoring programs.