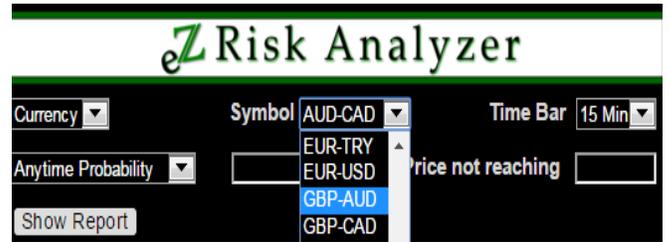
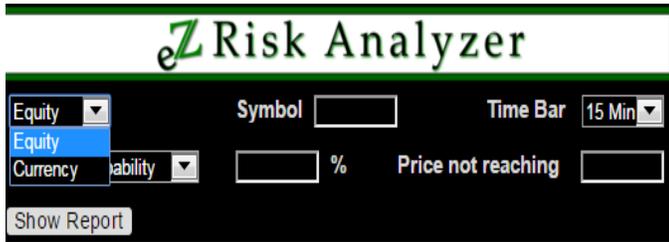


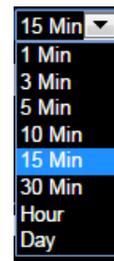
How to use Ez Risk Analyzer

Ez Risk Analyzer provides in-depth probability and timeframe analysis of underlying assets not reaching a selected target price. Let's walk through the process of how to master Ez Risk Analyzer and take advantage of this powerful tool.



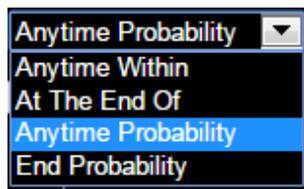
Ez Risk Analyzer allows traders to:

- Analyze Equity and Currency in real time by selecting the Time Bar they want to use in their analysis.

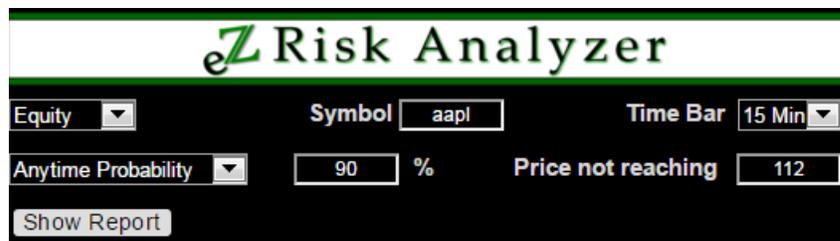


- Select Timeframe.

- ✚ “Anytime Within” – Select a period of Time Bars and find the probability that **within** the set period of Time Bars the underlying will not reach a selected target price.
- ✚ “At The End Of” – Select a period of Time Bars and find the probability that at **the end** of the set period of Time Bars the underlying will not reach a selected target price.
- ✚ “Anytime Probability” – Select a probability and find the maximum timeframe **within** which the price of the underlying asset will not reach the selected target price.
- ✚ “End Probability” – Select a probability and find the maximum timeframe at **the end** of which the price of the underlying asset will not reach the selected target price.



- Set parameters.



➤ Click “Show Report” button.

Report for “Anytime Probability” Analysis

Let’s assume a trader wants to analyze how long an underlying asset will not reach a selected target price.

To accomplish this, the trader must select the size of the Time Bar, desired probability, and target price.



In this example we are trying to find out the timeframe for which Apple stock, with a 90% probability, will never exceed the target price of \$107 based on a 15 min Time Bar analysis.

The top table provides the current Bid/Ask prices, date, and timestamp of the displayed results.

The bottom one provides a detailed analysis for the different historical periods ranging from 250 to 1250 Time Bars based on 90% Historical and Stress Test probabilities. Results are also available based on closing as well as IntraBar (High/Low) prices of the selected Time Bars.

If you need help click the  image and you will get Help topics on the right side of the screen.

How do we decide the length of historical period to base our analysis off?

First, in the decision making process, a trader must rely on his vision of the future movement of the underlying asset. If the trader predicts that the future time period of the underlying will behave similar to the near past historical behavior, short term history (250 / 500 Time Bars) should be used. In the example above, when we are using 15 min Time Bars, the 250/500 bar history statistically analyzes the last 3750 / 7500 trading minutes respectively of the underlying’s price behavior.

If a trader anticipates a more unpredictable movement could occur in the near future, it is wise to take into consideration a more prolonged historical period (750 Time Bars or more), as it might incorporate different patterns of the price behavior of the underlying asset, which will better predict the future price move.

Historical or Stress Test Probability?

After deciding the number of Time Bars to base a strategy off of, a trader must decide whether to use Historical or Stress Test probability in their analysis. To recap the difference in these two probabilities:

- ✚ Historical probability takes into consideration direction of the underlying moves.
- ✚ Stress Test probability takes into consideration the magnitude of the move, but not a direction, which makes it a better indicator of the “worst case” scenario.

Both probabilities are very important; therefore, our results report contains outcomes for both.

Closing or IntraBar?

Users have the option to base their analysis on either the closing point of each historical time bar or based off IntraBar results:

- ✚ Closing – Utilizes the closing price at the end of each time bar. This eliminates the movements, which some traders may call “noise”, that occur throughout each time bar.
- ✚ IntraBar – Utilizes the high/low price of each time bar to produce results.

Lets look more into the Apple report above

In the report above, the results differ depending on the length of the historical period. The analysis based off the past 250 time bars (last 3750 trading minutes) gives a timeframe of 26 bars (390 minutes) prior to the underlying price reaching a target price of \$107 (based on 90% historical probability and closing prices of the 15 min time bar), while an analysis based off the past 1000 time bars (last 15000 trading minutes) result in a 17 bar (255 minutes) timeframe.

Why do these two historical periods produce different results? This can be explained by the last 250 closing prices of the 15 min time bar. During this period the underlying moves down more often than up compared to the last 1000 bars. Because our target price of \$107 is above the current Bid/Ask price of \$105.19 / \$105.20 and Historical probability takes into consideration direction of the moves, it will take longer to reach \$107 based on the analysis of 250 bars than 1000.

Now let’s analyze results based on Stress Test probability. According to the report, it takes 9 / 13 bars respectively to reach \$107 (based on 90% Historical probability and closing prices of the 15 min time bar). The reason it takes less time to reach \$107 in this example based on 250 bars history rather than 1000 bars history is the exact difference between Historical and Stress Test probabilities – direction vs. magnitude of the moves.

The analysis of the Historical probability results concluded that the underlying in the last 250 bars went down more often than during the last 1000 bars; therefore, taking longer for the price to go up to \$107. However, the analysis of Stress Test probability tells that the magnitude of the down moves in the last 250 bars was higher than magnitude of the up moves in the last 1000 bars. Since the magnitude in the last 250 bars was higher, the Stress Test probability shows the price of \$107 could be reached faster based on the analysis of 250 bars vs. 1000 bars.

One can ask why we have to care about magnitude of the down moves when our target price is above the current price.

If the underlying asset has an ability to make a 10% move in one direction, to properly assess the worst case scenario, a trader has to assume that the underlying can make the same 10% move, but now against your position. That is exactly the reason why EzTrade introduced Stress Test probability, which gives traders an ability to assess the risk based on worst-case scenario.

Making a decision of what timeframe to consider 26 or 9 bars should depend on your risk tolerance. If a trader thinks the reality could be skewed against them, but not in a full force, they may consider a blend between the probabilities and choose a time period between 9 and 26 bars.

Ez Risk Analyzer’s goal is to provide traders with the full information needed to help properly assess risk.

It’s always your decision to “pull the trigger” and get in or not get in on the trade, so before you act it is very important to know your risk and set your expectations properly!

Report for “Anytime Within” Analysis.

This report is opposite to the “Anytime Probability” analysis report. In this analysis the trader sets a timeframe (number of time bars) and target price. The result report provides probability that the selected target price would not be reached within the set timeframe.

AAPL - APPLE INC
Current Bid: \$105.19 Ask: \$105.2
All data as of Friday, 04/22/16 Time: 12:10:25 EST

PRICE NOT REACHING \$107 ANYTIME WITHIN NEXT 300 MINUTES										
Probability Based On	250 Bars		500 Bars		750 Bars		1000 Bars		1250 Bars	
	Hist	ST	Hist	ST	Hist	ST	Hist	ST	Hist	ST
Closing Prices	94%	74.8%	87.6%	76.8%	89.07%	80.93%	88.6%	81.8%	88.88%	82.64%
IntraBar Prices	90%	70.4%	85.2%	72.4%	84.8%	75.2%	84.1%	76.5%	84.48%	76.64%

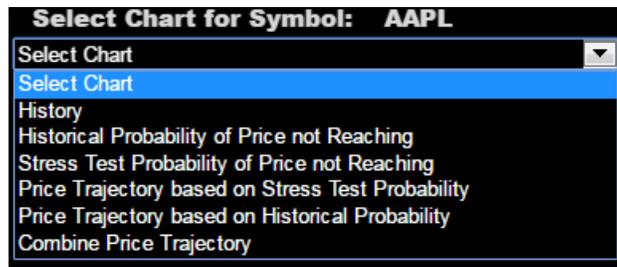
In this example the selected timeframe is 20 Bars. Each Time Bar is 15 min, which makes the timeframe 300 minutes. The report provides probabilities that the underlying asset will not reach \$107 anytime within next 15 Bars (300 minutes) based on Time Bar Closing and IntraBar (High/Low) prices.

Reports for “At The End Of” and “End Probability” Analysis.

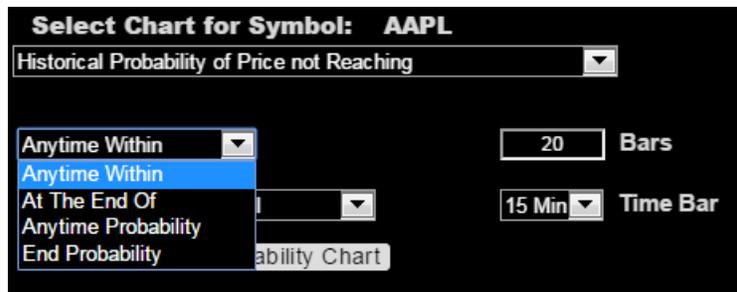
These two reports produce results for the end of the analyzing timeframe period vs. anytime during the timeframe period. Could be very helpful for binary and option traders who are primarily interested in the probability of the underlying asset not reaching a target price at expiration.

Charting

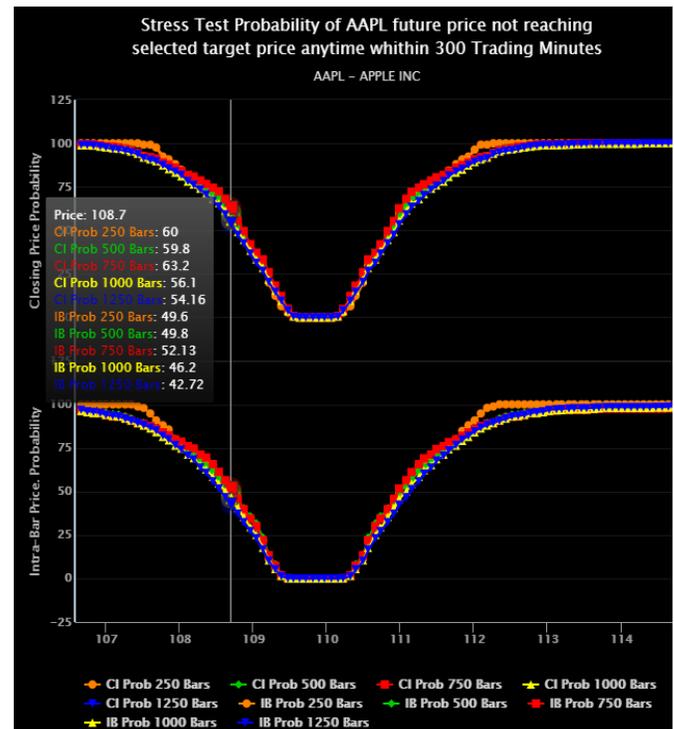
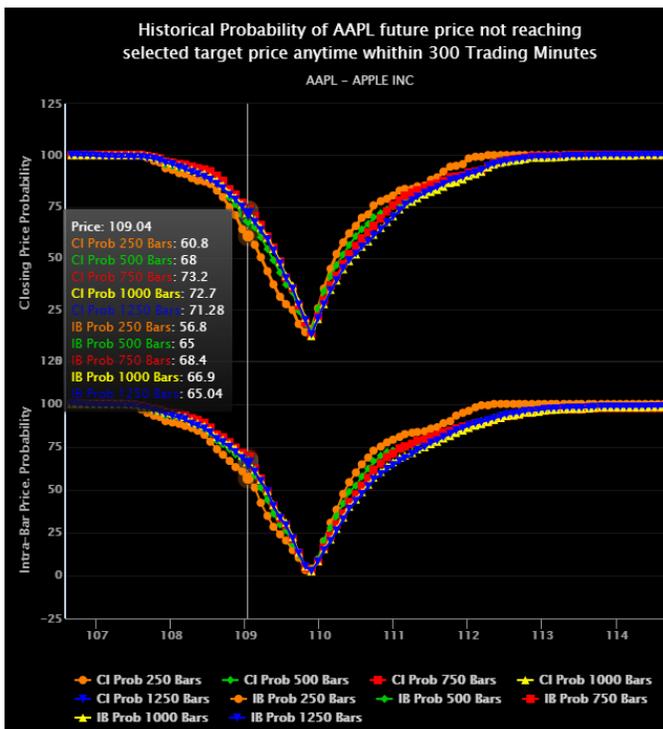
Ez Risk Analyzer charting expands unique capabilities of risk analysis that can be found in the report.



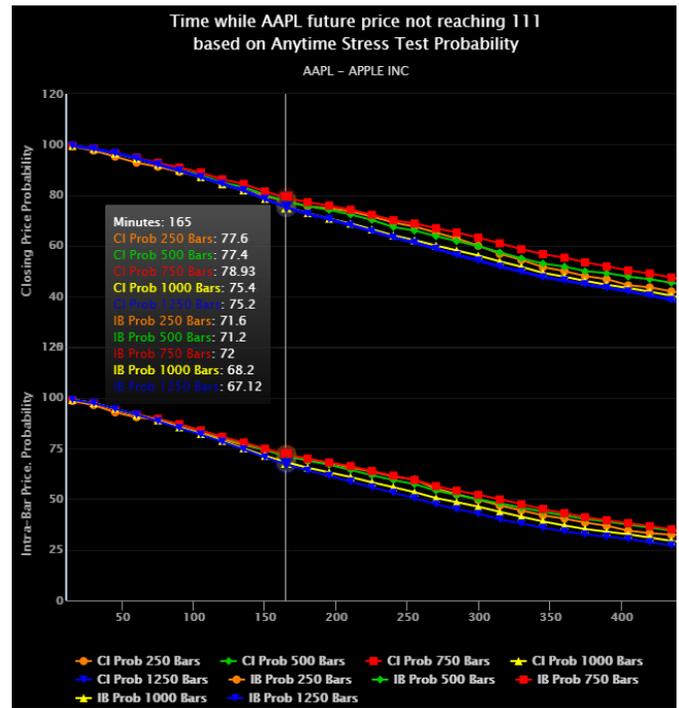
Historical / Stress Test Probability of Price not Reaching



“Anytime Within” chart depict the probability of not reaching the price base on a set number of time bars.



“Anytime Probability” charts depict the probability of a price not reaching the target price based on different historical timeframes. This analysis can help determine the timeframe and probability pair that should prompt a certain trade management action.



Select Chart for Symbol: AAPL

Stress Test Probability of Price not Reaching [Dropdown]

Anytime Probability [Dropdown]

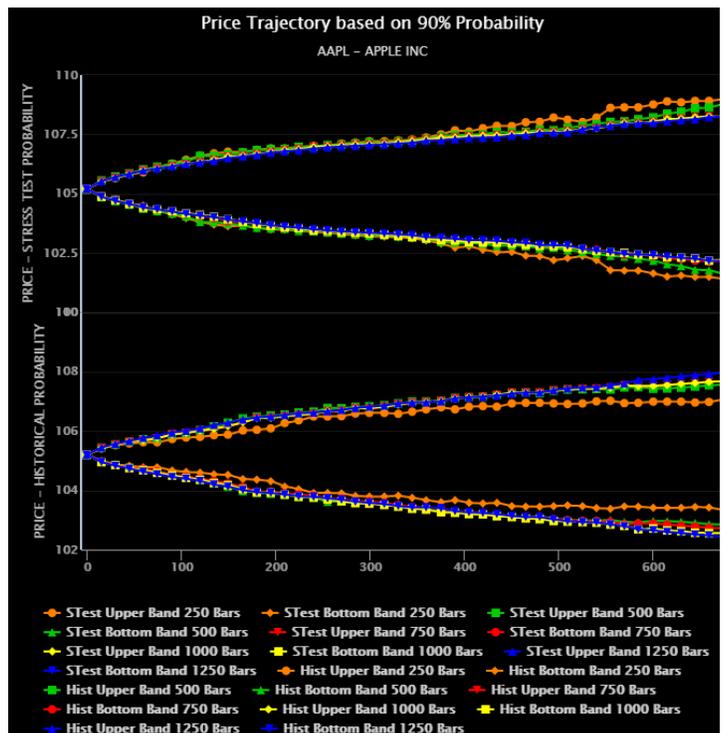
Price not reaching [Input: 111]

History Analysis [All] [Dropdown] [15 Min] [Dropdown] Time Bar

Show Stress Test Probability Chart

Combine Price Trajectory

Price trajectory charts depict future upper/bottom price bands for a selected probability for up to 30 time bars.



Select Chart for Symbol: AAPL

Combine Price Trajectory [Dropdown]

Probability [Input: 90]

Historical Analysis [All] [Dropdown]

Show Price Trajectory Chart

A trader can also click on the legend at the bottom of the chart to toggle the appearance of a line on the chart. This helps one to view a full analysis and then zero in on the one they want.