Hedging with futures

Strategies designed for portfolio protection

Leverage and hedging

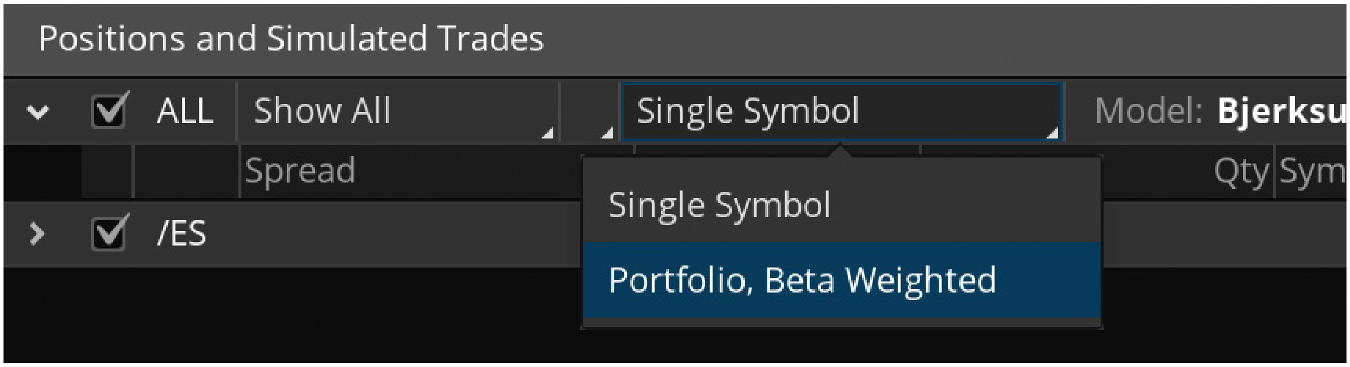
Whether you’re talking landscaping or portfolios, hedges can offer protection. When done right, a hedge should move in the opposite direction of your portfolio. So if your portfolio is declining in value, the hedge should rise in value. And futures can be used to hedge a portfolio because they’re highly leveraged. That means they could potentially help offset losses while using a relatively small amount of capital.

Please note: Using leverage can be risky because a small move in either direction can have a significant impact on your portfolio, magnifying gains and losses.

Let’s say your portfolio is long in stock for several large, well-known companies that are part of the S&P 500 Index, and is worth around $400,000. If you’re worried about a short-term downturn in the market and don’t want to sell any of your stocks, you could instead sell E-mini S&P 500 Index futures contracts (/ES) to hedge your portfolio, potentially reducing your losses if the stock market falls.

A beta weight-ed decision

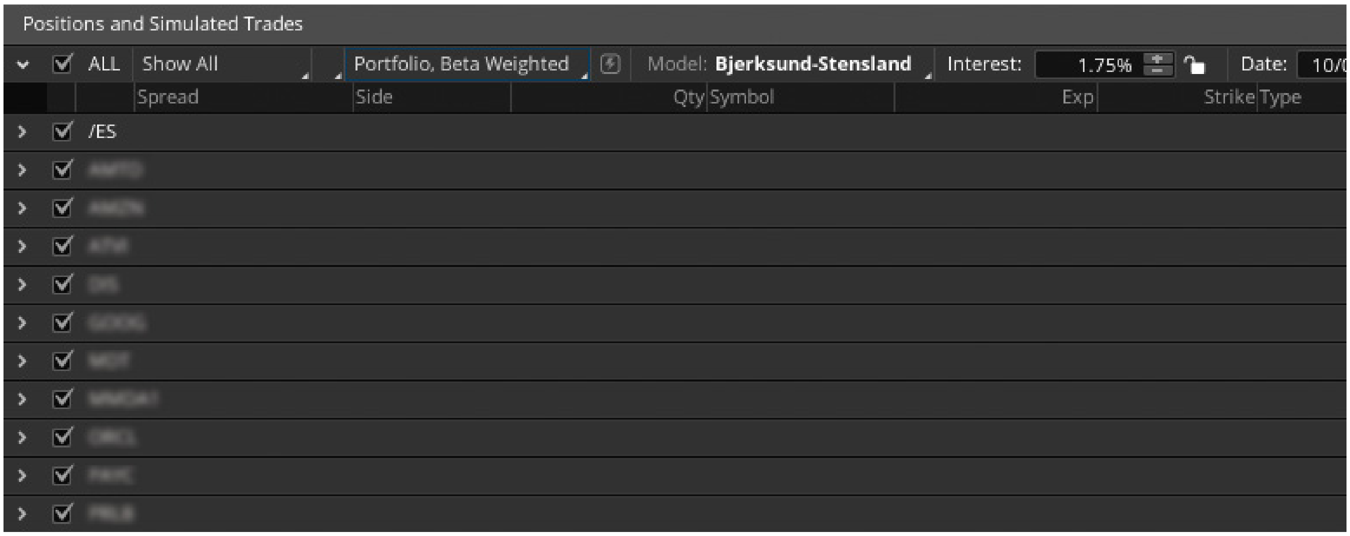
You don’t need to guess how a hedge could affect your portfolio. The beta weighting tool in thinkorswim® can help show the impact. To use the tool, go to the Analyze tab > Risk Profile, and input /ES in the symbol box. Scroll down to the “Positions and Simulated Trades” section, click the drop-down for “Single Symbol,” and select “Portfolio, Beta Weighted.”



For illustrative purposes only. Not a recommendation.

Once you've switched over to a beta weighted portfolio, you'll be able to see all your positions at the same time under "Positions and Simulated Trades."

Helpful hint: Any simulated trades will be included in this section as well. You can delete them by clicking on the "X" to the right of the simulated trade before analyzing your portfolio.



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Delta can help ya

A beta weighted delta can help you determine how much your portfolio could move up or down. The delta measures your portfolio's risk relative to the underlying beta symbol you've selected, and for every 1-point move in the beta symbol, your portfolio will likely increase or decrease by the delta amount shown.

Helpful hint: You can find the delta for a beta weighted portfolio in the Price Slices section on thinkorswim.

If the delta of the E-mini S&P 500 Index future is 182.50, that means if the /ES increases by 1 point, your portfolio will likely increase by $182.50, and if the /ES decreases by 1 point, your portfolio will likely decrease by $182.50. That also means if the market falls 100 points, your portfolio can expect to decrease by $18,250.

Helpful hint: While the delta is a good indicator when looking to hedge, it's a theoretical calculation, so the actual increase or decrease to your portfolio may differ.

If you're concerned about a possible downturn in the market and worried that the S&P 500 Index could fall, this is where the E-mini S&P 500 Index future could help. By selling forward one /ES contract, you could hedge your portfolio and potentially offset the losses it might incur if the S&P 500 falls.

/ES has a multiplier of $50, which means every 1-point move is equal to $50. Since our example stock portfolio has a delta of 182.50, let's take a look at what would happen If you sold forward one contract.

- Every time the /ES decreases by 1 point, it will decrease by $182.50, but after selling forward one contract you're gaining $50 for each 1-point decrease, so now you're only losing $132.50.
- That means you've effectively decreased your delta by 50 points to $132.50. Now if the /ES drops 100 points, you're only losing $13,250 instead of $18,250.

To find out what adding a short /ES position might look like in your account, go to the "Add Simulated Trades" section under the Analyze tab. Enter /ES if it's not already shown. Then click on the Bid Price to create a simulated trade of selling forward one /ES contract. Now click back over to Risk Profile.

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As the illustration above shows, by selling forward one contract your delta has decreased to 132.50. While this hedge has decreased your exposure to losses if the market falls, it can also impact your portfolio if the market increases. Instead of making $182.50 if the /ES increases 1 point, your portfolio would only increase by $132.50. The table below provides a brief breakdown of what happens to your portfolio if /ES increases or decreases with the hedge and without it.

	No hedge	Hedge
Delta	$182.50	$132.50
100-point increase in /ES	Portfolio increases by $18,250	Portfolio increases by $13,250
100-point decrease in /ES	Portfolio decreases by $18,250	Portfolio decreases by $13,250

Remember, this is a theoretical calculation, so the actual increase/decrease in your portfolio may differ, and profits and losses are not realized until the position is closed. It simply provides a basic example of how futures contracts could be used to hedge a portfolio. There are other factors to consider when hedging, such as how long to hedge and what percentage of the portfolio to hedge.

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