

Defined and undefined risk

DEFINED VERSUS UNDEFINED RISK

The distinction that governs options risk: a defined-risk position has a known, capped maximum loss (a long option's premium, a spread's width); an undefined-risk position has a maximum loss that is large or unbounded (a naked short call's unlimited loss, a naked short put's large one). The single most important risk question about any options position is which it is - and undefined-risk positions demand a respect the premium income disguises.

The foundational options risk distinction is not direction but risk definition: does this position have a known worst case, or does it not? Everything in the risk module follows from sorting positions into defined and undefined, because the two demand entirely different treatment.

The two categories

Defined risk: the maximum loss is known and capped - a long option can lose only its premium; a spread (module 5) can lose only the difference between its strikes less the credit; the worst case is a number you can write down before entering. Undefined risk: the maximum loss is large or unbounded - a naked short call can lose without limit as the underlying rises (module 1's unbounded shape); a naked short put can lose down to the underlying reaching zero, a large but bounded amount; the worst case is a catastrophe, not a number. The premium disguise: undefined-risk positions collect premium and usually profit, so they feel safe - a naked short option wins most of the time, right up until the move that delivers the unbounded loss; the frequent small wins disguise the rare ruinous loss.

Why the distinction governs everything

Defined and undefined risk are managed in completely different ways. A defined-risk position is sized by its known maximum loss (lesson 2) - straightforward, because the worst case is a number. An undefined-risk position cannot be sized that way, because its maximum loss is a catastrophe - so it demands margin, active management, and a respect proportional to the tail it carries, or it should not be held at all. The single most dangerous options mistake is treating an undefined-risk position like a defined one: selling naked options for the steady premium, sized as if the premium were the risk, until the move that was always possible arrives and delivers the loss the premium never bounded.

The stance the track takes

This track is education, not advice, and it states the risk plainly: undefined-risk options positions carry tail risks that have ruined traders who collected premium for months and gave it all back, and more, in a day. The track explains how they work and what they risk; it does not recommend them, and it flags their danger wherever they appear, because the premium-collecting steadiness is exactly what disguises the tail. Sorting every options position into defined or undefined risk, and treating the

undefined ones with the respect their tail demands, is the risk module's foundation - and the honest answer to an instrument whose most seductive positions are its most dangerous.

Check your understanding

1. What distinguishes defined from undefined risk?

- a. Defined-risk positions are more profitable
- b. A defined-risk position has a known, capped maximum loss (a long option's premium, a spread's width); an undefined-risk position has a large or unbounded maximum loss (a naked short call's unlimited loss)
- c. Defined risk applies only to calls

Answer: b. The worst case is a number you can write down, or a catastrophe you cannot. The single most important risk question about any options position is which it is.

2. How does an undefined-risk position disguise its danger?

- a. It has no premium
- b. It collects premium and usually profits - a naked short option wins most of the time, right up until the move that delivers the unbounded loss; frequent small wins disguise the rare ruinous loss
- c. It is always in the money

Answer: b. The premium-collecting steadiness is exactly what disguises the tail. Traders have collected premium for months and given it all back, and more, in a day - the most dangerous options mistake.