If you feel anxious about how bad losses could be, you are in the majority.

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Introduction

Traditional risk labels do not quantify how large losses could be in bad years.

Nirvana does.

Nirvana is the only search engine for financial products that addresses retail “loss- aversion” (by far the most dominant investor behaviour on the planet) directly, by allowing you to search by **maximum expected loss levels** and see only items that remained within it, or check estimated loss levels for specific products[2].

You are not alone

Vast majority (72%) of people in the world worry about losses, not averages[3]. If you feel anxious about how bad losses could be, **you are in the majority**. You also **have a right to know**. “Tail-risk” (estimates of sizes of losses) metrics are relied on across insurance and institutional trading houses, and are embedded in the rules that governments use to supervise banks globally. They exist to quantify rare, severe losses. Institutions’ existence depends on knowing it.

How about for you?

History shows that even highly rated, mainstream funds can suffer deep losses, regardless of their marketing labels.

As an example, based on current data, even best-in-class Morningstar 5-Star and Gold medal jointly-rated US mutual funds’ expected loss across 1-in-20 worst years is up to **-28%** and across 1-in-100 worst years is up to **-36%**, with 10% of these “best-in-class” mutual funds showing possible average loss levels up to **-67%**[4].

What "1-in-20" or "1-in-100" odds really mean over your remaining work-life horizon:

A "1-in-20 year" event means a 5% chance each year; "1-in-100" means 1% each year. Over multiple years, the chance of seeing **at least one** such year grows quickly:

Years to Retirement	Odds of seeing at least one 1-in-20 worst year (5%/yr)	Odds of seeing at least one 1-in-100 worst year (1%/yr)
5 years	22.6%	4.9%
10 years	40.1%	9.6%
20 years	**64.2%**	**18.2% (~1-in-5)**
30 years	**78.5%**	**26.0% (~1-in-4)**
40 years	**87.1%**	**33.1% (~1-in-3)**

Method: P(≥1 event in n years) = 1 − (1 − p)^n. Assumes independent years with constant probabilities. In turbulent markets, clustering can make real-world odds higher than these baseline figures.

Before retirement: deep losses rarely "come back" in time

Most people think "markets recover and my regular contributions will smooth it out." That story breaks when you look at simple arithmetic, realistic recovery times, and the order in which returns arrive. This section makes the risk visible at a glance.

1. **The asymmetry of losses**

Loss Level	Gains Required to Break Even
-10%	+11.1%
-20%	+25.0%
-40%	+66.7%
-80%	+400.0%

Takeaway: equal-and-opposite is a myth. Large losses demand disproportionately large subsequent gains.

2 Years to break even under realistic return rates

Using $(1 + r)^n = 1 / (1 - L)$, the minimum years n to recover a loss L at constant annual return r are:

Drawdown	4% p.a.	6% p.a.	8% p.a.	10% p.a.
-10 %	2.7 yrs	1.8 yrs	1.4 yrs	1.1 yrs
-20%	5.7 yrs	3.8 yrs	2.9 yrs	2.3 yrs
-40%	13.0 yrs	8.8 yrs	6.6 yrs	5.4 yrs
-80%	41.0 yrs	27.6 yrs	20.9 yrs	16.9 yrs

Takeaway: after a −40% drop, you are typically looking at most of a decade just to get back to even at 6% p.a. After −80%, the calendar does not cooperate.

It is your retirement: Why you have a right to clear tail-risk numbers

- **World Governments rely on it for bank solvency supervision:**
  Under the Basel III "FRTB" rules, banks measure trading-book capital using Expected Shortfall at the 97.5% one-tailed level, with scaling for liquidity horizons from a 10-day base.
- **Insurance companies' existence depends on it:**
  Under Solvency II, the standard formula targets one-year VaR at the 99.5% level (often described as a "1-in-200-year" protection point) for the Solvency Capital Requirement.
- **Insurance companies use it to price policies**:
  For catastrophe and aggregate risk, supervisors and firms frequently work with **TVaR/CTE** tail measures; for example, Bermuda's market monitoring references **99% TVaR** in capital resilience ratios.
- **Institutional trading houses and fund-managers rely on it:**
  They set risk limits, size positions by tail-risk contribution, with stress scenarios, and report ES alongside VaR in allocator packs.
- **Tail-risk is supported in <u>every mainstream risk system</u>** used by the global financial industry daily.
- **So, why not for you?**
  Nearly 2 billion people worldwide want to be able to set their personal loss-limits. Meaning, they want to know the "tail-risk" in their own investments – exactly like institutions are privy to.

  Nirvana democratises and exposes tail-risk numbers – "how much could this drop by" - for hard-working people, worldwide so they know and can decide accordingly.

  For example, if you have 10 or 5 years to retirement – can you afford to drop -67% on your retirement nest-egg, between now and then?

We inform. You decide.[5]

What Nirvana gives you

- Search by loss boundary: Set a maximum acceptable loss (for example, −20%). Eligible items are ranked by Compass Score for relevance to selected search parameters.
- Quantified downside: We enable you to see estimated losses in bad years, not just averages. Identical inputs on the same data snapshot produce identical outputs.
- Check possible loss-levels on what you already own: Enter a product name or symbol and see how its tail-risk compares to your boundary.
- Commercial neutrality: No in-house products, no commissions, no advice—just impersonal, deterministic analytics. We answer only to science and to you.

If you arrived with a Trust Code

Your subscription is 10% off. The issuer of the code receives 10% of net subscription revenue. One code per Member; Sur is excluded.

Annual subscription: daily Score updates for your saved searches, products of interest and products that meet your specifications.

Everyone benefits

We irrevocably pledge **10%** of total consolidated revenue to the Nirvana Foundation to protect forests and animal habitats, restore ecosystems, safeguard animals and their welfare, and advance humanitarian projects that improve the human condition.

Legal clarity

Nirvana is a neutral search network. Outputs are impersonal analytics and do not constitute advice, a recommendation, portfolio management, or an offer to transact. Eligibility is an internal, rules-based gate and does not consider any person's financial circumstances or holdings. Results are versioned and may change when data snapshots update.

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2. Search results. No pay-to-rank. No commissions. Information only; not advice or a recommendation.
3. Research cited by the Wall Street Journal (Benartzi, 30 July 2025) reports that approximately 72% of people worldwide exhibit loss aversion (1.9 billion), which helps explain widespread demand for clear downside information.
4. Estimates based on historical data; not guarantees. Past performance is not a reliable indicator of future results.
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