PLAN. INVEST. THRIVE.

INVESTING · PSYCHOLOGY

The volatility *playbook*.

Markets rise three years out of four, but they fall hard enough each decade that staying invested feels difficult exactly when it matters most. **The math of long-term returns is well-known. The hard part is staying in your seat while it plays out.** This is the framework we use with you.

THE FRAMEWORK · AT A GLANCE

PRINCIPLE 01 **Volatility is the price of admission** The 10% long-term average is a destination, not an annual experience.	PRINCIPLE 02 **Up years dominate the record** Three-quarters of the last 100 years have been positive for US stocks.
PRINCIPLE 03 **Declines tend to be followed by recoveries** After every bear-market threshold in the data, the next five years have been positive on average.	PRINCIPLE 04 **Time in the market beats timing of the market** Missing the best few weeks of a 25-year window cuts the result by more than a third.
PRINCIPLE 05 **Zoom out** Daily charts are noise. Monthly charts are a story. Annual charts are a plan.	PRINCIPLE 06 **Diversify globally; don't pick the winner** Country leadership shuffles every year. Owning all of them is the cheapest reliable answer.

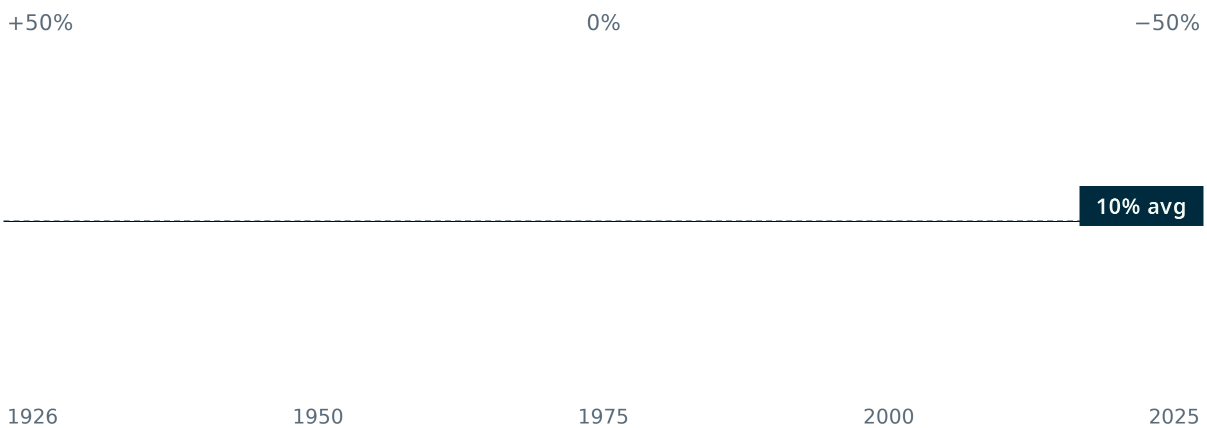
> The cost of getting volatility wrong isn't paid in the down years. It's paid in the recovery years ***you weren't there for***.
>
> — MPM WEALTH ADVISORS · INVESTMENT COMMITTEE

The *average* year is the rarest year there is.

The US stock market has compounded at **about 10% a year** over the past century. That number is the destination, not the experience. In any single year, returns swing from sharply positive to sharply negative — and the years that look "average" are vanishingly rare.

~10% **Long-term annualized return** · S&P 500, 1926–2025	54% / −43% **Best and worst year** · 1933 high · 1931 low	7 of 100 **Years near the average** · within two points of 10%

S&P 500 — ANNUAL TOTAL RETURNS · 1926–2025



The chart shows what an average looks like up close. *The black line is the 10% long-term average. Almost no individual year sits on it. Investors who expect the line to feel like a steady climb are repeatedly surprised — and that surprise is what triggers most of the costly behavior we see.*

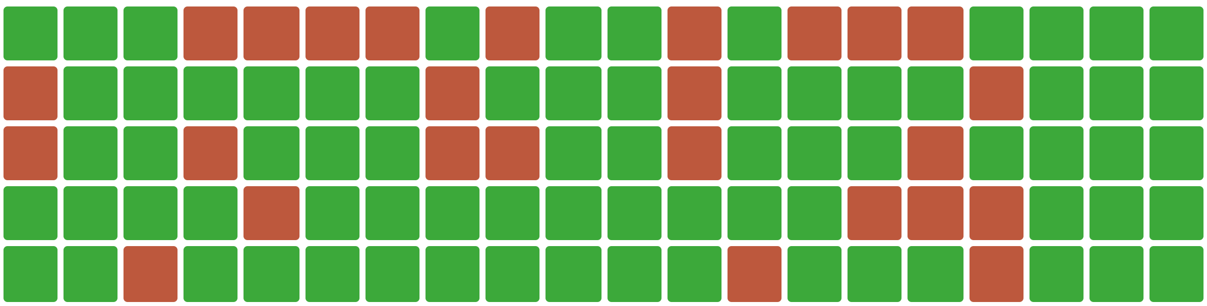
If you accept that volatility is the cost of being invested, the question stops being *"how do I avoid it?"* and starts being *"what do I do when it shows up?"* The rest of this document is the answer.

02 UP YEARS DOMINATE

Three-quarters of the last hundred years *made money*.

Every year is its own coin flip in the moment. But the historical record is not a coin flip — it is heavily weighted toward gains. **75 of the past 100 years have been positive for US stocks.** That is the base rate worth holding in mind when the next bad week arrives.

ANNUAL RETURNS · 1926–2025 · EACH SQUARE = ONE YEAR



75 positive years **25** negative years Source: CRSP 1–10 Index, 1926–2025

03 DECLINES TEND TO BE FOLLOWED BY RECOVERIES

The best one-year returns follow the *worst* ones.

Every drawdown in the dataset has eventually been followed by a recovery. **One, three, and five years after declines of 10%, 20%, and 30%, the average cumulative return has been positive — and usually substantially so.** The deeper the decline, the stronger the average rebound.

CUMULATIVE US MARKET RETURNS AFTER DECLINES · 1926–2025

After a 10% decline 29 observations — Average cumulative return

1 YR	3 YR	5 YR
+11.8%	+34.7%	+70.0%

After a 20% decline 15 observations · bear market — Average cumulative return

1 YR	3 YR	5 YR
+18.8%	+40.7%	+67.1%

After a 30% decline 7 observations — Average cumulative return

1 YR	3 YR	5 YR
+21.4%	+27.1%	+68.2%

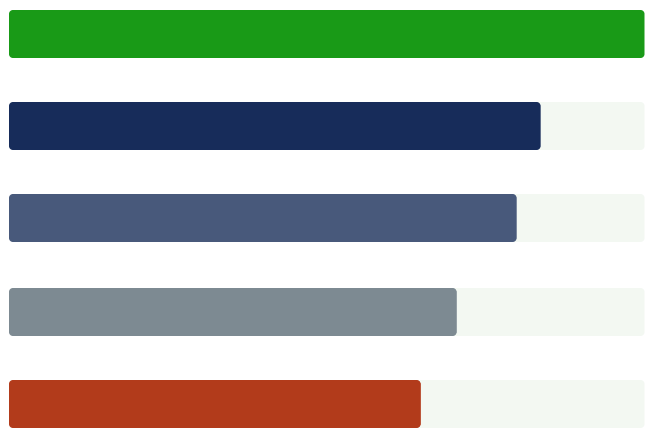
The deeper the drawdown, the more powerful the recovery has tended to be. *The catch is that the recovery starts before it feels safe. The clients who get the most out of these averages are the* *ones who don't try to wait for permission. Source: Fama/French Total US Market Research Index, July 1926 – December 2025.*

04 TIME IN THE MARKET BEATS TIMING OF THE MARKET

Missing the *best few weeks* wrecks the whole 25-year run.

The best market days cluster inside the worst markets. The best week of the last 25 years ended November 28, 2008 — mid-collapse. The best month ended April 22, 2020 — mid-pandemic. Selling to cash to "wait it out" is almost arithmetically guaranteed to miss them.

$1,000 INVESTED IN THE RUSSELL 3000 · 2001–2025



Stayed fully invested Did nothing for 25 years	**$8,360**	Baseline
Missed best week 5 trading days · Nov 2008	**$6,977**	−16.5%
Missed best month 21 trading days · April 2020	**$6,676**	−20.1%
Missed best 3 months 63 trading days · June 2020	**$5,893**	−29.5%
Missed best 6 months 126 trading days · Sept 2009	**$5,425**	−35.1%

Every "best" period in this chart ended either during or immediately after a crisis. *The investor who fled to cash to feel better lost the rebound that paid for the entire decade. Source: Dimensional Quick Take, Russell 3000 Index 2001–2025.*

05 ZOOM OUT

The market looks worse than it is at the *resolution* you usually watch.

The same three-year market window looks chaotic by the day, choppy by the week, and almost calm by the month. **The chart you check changes the decision you make.**

VIEW

Daily

Anxiety-inducing. Reactive.

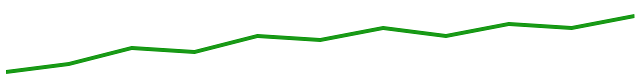
VIEW

Weekly

Choppy, but trending. Calmer.

VIEW

Monthly



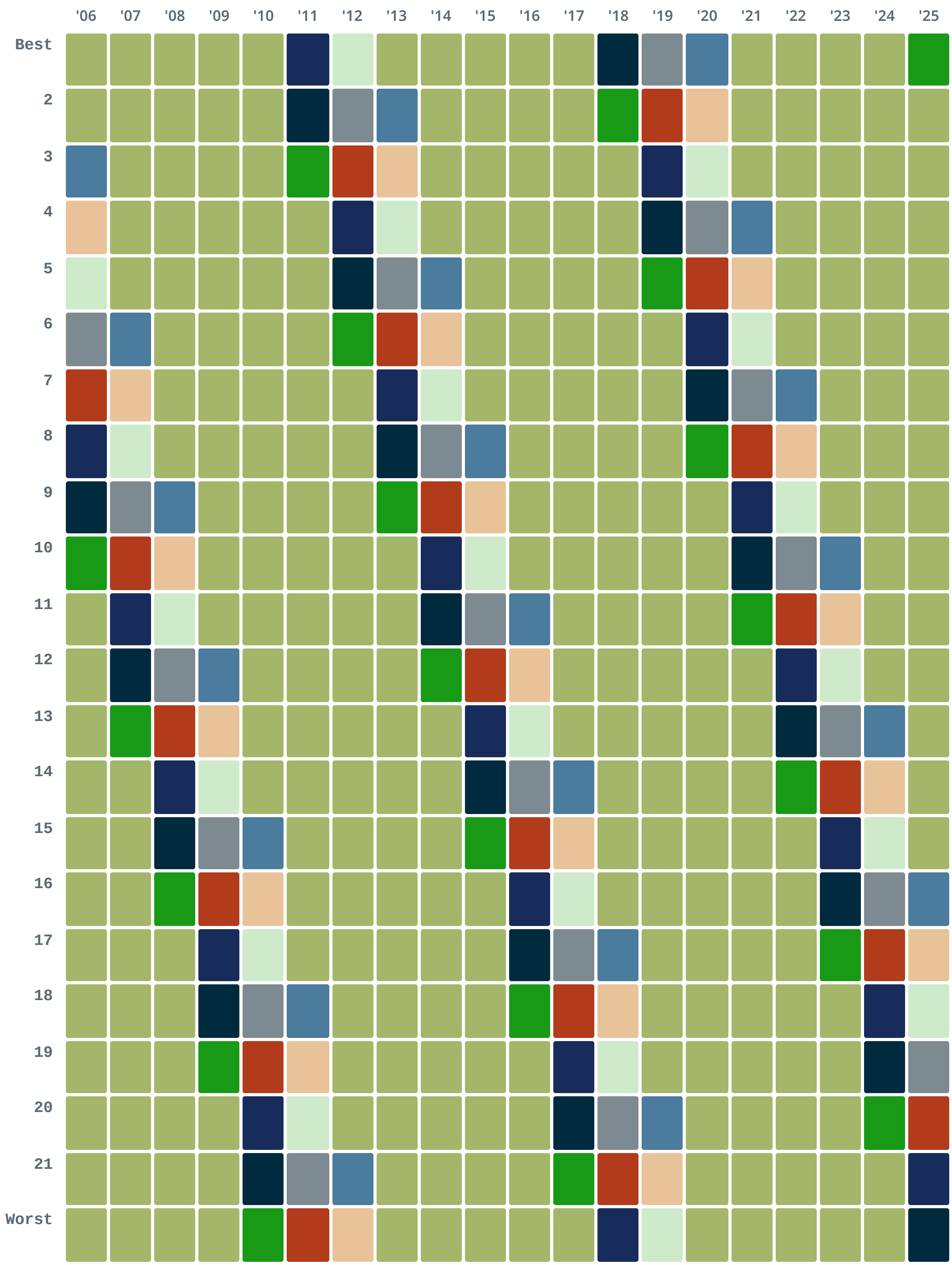
A trend you can plan around.

Same market, three different stories. The annual or monthly view is the one we share at your review meetings — because it's the resolution at which the data actually means something.

Country leadership *shuffles*. Owning everything is the cheaper answer.

Each column below is one year, sorted top to bottom from best-performing developed country down to worst. **If country leadership were predictable, the colors would form stripes.** They don't. The US was top-two over the full 20-year span, but finished in the bottom half in 7 individual calendar years — and finished #1 just once.

DEVELOPED-MARKET COUNTRY RANKINGS · 2006–2025 · 22 COUNTRIES



The forecasting record is dismal. *No professional team has consistently picked the year's top country in advance — including teams paid handsomely to try. Holding all of them, at sensible* *weights, is the cheapest path to participating wherever the return shows up. Source: MSCI country indices (net dividends), 2006–2025.*

This same logic operates inside the US market too — across sectors, across factors, across individual stocks. **Diversification is the only free lunch in investing.** We use it everywhere we can.

The math is on your side. The *brain* isn't.

Every principle on the prior pages is settled empirically. The reason investors still underperform their own portfolios is not a knowledge problem — it's an emotion problem. These are the four traps we watch for, in you and in ourselves.

TRAP 01

Loss aversion

SOUNDS LIKE

"I can't watch this drop another day."

A 20% loss hurts about **twice as much** as a 20% gain feels good. The brain treats the discomfort as a signal that something must be *done*. Usually the something is selling — at a low.

TRAP 02

Recency bias

SOUNDS LIKE

"This is the new normal. The last six weeks are a warning."

The most recent data feels disproportionately important. Six weeks of red headlines get extrapolated into a permanent regime change. **The next six weeks almost never look like the last six.**

TRAP 03

Action bias

SOUNDS LIKE

"We have to do something."

Doing something feels like control. In medicine, in airplanes, and especially in investing, **the costly mistakes are usually mistakes of action**. Inaction is a position, and often the right one.

TRAP 04

Herding & confirmation

SOUNDS LIKE

"Everyone I respect is moving to cash."

Once a narrative takes hold, the brain seeks evidence that supports it and discounts the rest. **The crowd has been wrong at every major turning point** — by definition, because the turn happens precisely where the crowd is.

A **A Foundation layer that doesn't depend on this week.**

We hold 3–5 years of your withdrawal needs in stable, low-volatility assets. Your spending never has to wait for a recovery.

B **Rebalancing on a rule, not on a feeling.**

When the portfolio drifts more than 5% from target, we rebalance — mechanically. That means buying what's down and selling what's up, *without an opinion about what comes next.*

C **Tax-loss harvesting in down years.**

The drawdown becomes an asset on your tax return. Losses get banked against future gains — turning the worst moments into a real benefit.

D **A phone call before you make a big move.**

Anytime you find yourself wanting to "do something," call. Often the right answer is "wait, and let us tell you why." We'd rather have the conversation than have you watch alone.

E **A measurement window matched to your plan.**

We talk in years, not weeks. Your statements, our meetings, your performance reviews — all scaled to the resolution your plan actually operates at.

PLAN. INVEST. THRIVE.

Your job is harder than ours. *You feel it.*

We don't experience your portfolio the way you do — that's part of why we exist. The plan runs in the background, on a schedule, regardless of the news cycle. Our role is to keep the framework intact so the math has time to play out. Yours is to keep living a life it's worth playing out for.

Sources: Dimensional Fund Advisors (Quick Take, Above the Fray, Perspectives series); Fama/French Total US Market Research Index, July 1926 – December 2025; CRSP 1–10 Index; S&P 500 Index; Russell 3000 Index; MSCI country indices (net dividends). Past performance is no guarantee of future results. For client education only.