



A RETIREMENT INSTITUTE GUIDE

The Diversification Myth

How diversification and asset allocation differ — and why owning five kinds of stock is not the same as owning five different things.



WELCOME

Knowledge first. *Always.*

The Retirement Institute exists to help Americans approaching retirement make clear, confident, well-informed financial decisions — without a sales pitch.

This guide opens our Investments Series. It is about a single idea that almost everyone believes they already understand, and that a great many people have wrong in a way that only becomes visible in the worst month of their retirement.

Nearly every investor has been told not to put all their eggs in one basket. Very few have been told that the standard remedy — large cap, mid cap, small cap, international, emerging markets — puts nearly all of those eggs in one basket anyway. Five labels. One asset class. When that class falls, they fall together.

What follows is not an argument against stocks, and it is not an advertisement for anything. It is an argument for knowing the difference between how your money is *divided* and whether the pieces actually behave *differently*.

BEFORE YOU BEGIN

- ◆ Nothing here is a recommendation. Several categories discussed carry high fees, limited liquidity, or complexity that makes them unsuitable for many investors.
- ◆ Every figure is historical. Correlations change — that is the entire point of the guide — and past results do not predict future results.
- ◆ Diversification does not ensure a profit and does not protect against loss in a declining market. No allocation can.
- ◆ Case studies are hypothetical illustrations. Full disclosures appear at the end.

INTRODUCTION

Don't put all your eggs in two baskets

Ask most retirees how their portfolio is diversified and you will hear a list: some large company stocks, some mid caps, some small caps, a slice of international, a little emerging markets, and bonds. Six or seven line items. It looks like diversification. It has the shape of diversification.

But five of those seven are the same thing. They are all **equities** — ownership stakes in businesses, priced daily by the same buyers, discounted at the same interest rates, and moved by the same fears. Dividing equities by company size or by country does not make them behave differently. It makes them look different on a statement.

Wall Street's oldest maxim says not to put all your eggs in one basket. In practice, the advice that follows usually amounts to putting them in *two*: stocks and bonds. That is better than one. It is a long way from the full set of choices.

PART ONE · THE MISTAKE

Categories, not classes

Large, mid, small, foreign and emerging are five categories of one asset class, not five asset classes.

PART TWO · THE EVIDENCE

They fall together

In 2008 every one of those categories lost money, and correlations rose exactly when investors needed them to fall.

PART THREE · THE REMEDY

A different engine

Real diversification comes from assets whose relationship to the economy is genuinely unlike that of a share of stock.

The distinction this guide rests on: *asset allocation* is how you divide the money.

Diversification is whether the pieces respond differently to the same event. Most savers have an allocated portfolio. Far fewer have a diversified one — and almost no one has been shown the difference.

NUMBER 1

Allocation and diversification are not the same word

The two terms get used interchangeably, including by people who should know better. They describe different things, and the gap between them is where most of the damage happens.

Asset allocation is a decision about proportions: 60% here, 30% there, 10% somewhere else. It is arithmetic. You can do it on a napkin, and any statement can display it as a tidy pie chart.

Diversification is a claim about behavior: that when one holding falls, the others will not fall for the same reason at the same time. It is not arithmetic. It cannot be seen on a pie chart at all, because the pie chart shows only the size of the slices, never their relationship to one another.

A pie chart can tell you how the money is split. It can never tell you whether the pieces will behave differently when it matters.

The measure that actually answers the question

The relationship between two holdings is described by *correlation*, a number between -1.00 and +1.00. At +1.00 they move in perfect lockstep. At 0.00 they are unrelated. At -1.00 they move in exact opposition.

Diversification only does real work as correlation falls. Two holdings at +0.95 are functionally one holding wearing two name tags. This is why a portfolio can hold nine funds and carry the risk of roughly one idea — and why the count of line items on a statement tells you almost nothing about how much protection is actually in the account.

Allocation is how the money is divided. Diversification is whether the divisions make any difference.

NUMBER 2

Five flavors of the same asset class

Large cap, mid cap, small cap, international and emerging markets are not five asset classes. They are five *categories* of one asset class: equities. Every one of them represents partial ownership of businesses that earn profits, and every one of them is valued by the same mechanism.

That shared mechanism is why they move together. A jump in interest rates changes the value of future profits everywhere at once. A recession scare reduces expected profits everywhere at once. The categories differ in *degree* — small companies usually fall further, emerging markets more still — but rarely in *direction*.

Then came 2008, which settled the argument:

CALENDAR YEAR 2008 — TOTAL RETURN	RETURN
U.S. large cap — S&P 500	-37%
U.S. mid cap — S&P MidCap 400	-36%
U.S. small cap — Russell 2000	-34%
International developed — MSCI EAFE	-43%
Emerging markets — MSCI EM	-53%
Managed futures — Barclay CTA Index	+14.09%

Index total returns, calendar 2008. Managed futures figure per BarclayHedge, as reported in industry coverage. Indices are unmanaged and not available for direct investment. Past performance does not guarantee future results.

Read the first five rows again. An investor holding all of them believed they owned five different things. What they owned was one thing, in five sizes and two languages. A review of the decade by a state pension commission put it plainly: these markets are considerably correlated, and in 2008 they all crashed together.¹

Five names on a statement. One economic engine underneath all of them.

NUMBER 3

Correlation rises exactly when you need it to fall

Here is the cruel part, and it is the reason this guide exists. Correlation is not a fixed property. It moves — and it moves in the least helpful direction available.

In calm markets, investors discriminate. They reward one company and punish another, and the pieces of a portfolio genuinely behave differently. Research tracking average pairwise correlation across S&P 500 sectors found it settling into the 0.40–0.50 range during quiet stretches — the market behaving, as the authors put it, like a market of stocks.²

In a panic, investors stop discriminating. They sell everything and ask questions later. That same research measured average pairwise correlation spiking to **0.83** during the 2008 financial crisis and to **0.92** during the COVID collapse of March 2020.² Diversification within equities does the least work on precisely the days it is most needed.

Fire insurance that lapses when the building catches fire is not insurance. Diversification that disappears in a crash is not diversification — it is a chart that was comforting in good weather.

Geography has been closing too

Foreign stocks are widely sold as the fix. The record is more modest. Morningstar found the three-year correlation between developed non-U.S. markets and U.S. stocks at **0.92** through 2022, easing to 0.71 by the end of 2025.³ Emerging markets have been the better diversifier of the two, for real structural reasons — a different sector mix and a Chinese economy on its own cycle — but at a correlation still well above zero, and with far more volatility for the privilege.

Correlations are lowest when you don't need them and highest when you do.

NUMBER 4

Bonds are a real second basket — part of the time

Bonds genuinely are a different asset class. A bond is a loan, not an ownership stake. It is priced off interest rates and credit risk rather than off corporate profits, and for two decades it did exactly what the 60/40 portfolio needed: it rose when stocks fell.

That relationship is not a law of nature. It is a regime, and regimes end. The stock-bond correlation was mostly positive from the mid-1970s through the late 1990s, turned negative around 2001, held there for twenty years — and snapped back to positive in 2022.⁴

What that cost in a single year

- ◆ The S&P 500 returned about **-18%** in 2022 on a total-return basis.⁴
- ◆ The Bloomberg U.S. Aggregate — the core bond benchmark — fell about **-13%**, the worst year in the history of the index.⁴
- ◆ A 60/40 portfolio fell roughly **17%**, its worst showing since 1937 and among the worst in two centuries of records.⁵
- ◆ Meanwhile the SG Trend Index, tracking large trend-following managers, gained a record **27.3%** that year.⁶

The cause was inflation. When inflation is the dominant worry, rising rates hit stock valuations and bond prices simultaneously — and the safe half of the portfolio cushions nothing. Since early 2022, equities and bonds have declined together in a meaningful share of months.⁷

None of this means bonds are broken. It means a two-basket portfolio depends on one relationship holding, and that relationship has a history of changing sign.

A portfolio built on one correlation is built on an assumption, not a structure.

NUMBER 5

What real diversification looks like

The test is a plain question: *does this make money for a different reason than a share of stock does?*

- ◆ **Managed futures.** Funds taking long and short positions across currencies, rates, commodities and stock indexes, following price trends. Because they can be short, a sustained decline is an opportunity rather than a loss — which is why 2008 and 2022 were strong years while stocks fell.
- ◆ **Commodities.** Energy, agriculture and metals are priced by physical supply and demand, and often rise with the inflation that damages stocks and bonds.
- ◆ **Real estate.** Direct property answers to rents, occupancy and local supply — though listed REITs trade like equities, and did in 2008.
- ◆ **Private equity.** Ownership of unlisted companies, with a longer horizon and no daily quote — but read page 09 before trusting its reported numbers.

The access objection is a decade out of date

The usual reply is that this is fine for endowments and out of reach for everyone else — high minimums, lock-ups, capital calls, K-1s, layered fees. Fifteen years ago that was largely true. It is no longer the whole picture.

Interest in *liquid alternatives* accelerated after 2008, pushing investors toward transparency, liquidity and lower-correlation returns that had been available mainly through institutional hedge fund structures.¹⁵ Many of the same strategies now come in registered mutual funds and ETFs: daily pricing, daily liquidity, published holdings, 1099 reporting, no minimum beyond one share. Fidelity launched a managed futures ETF in 2025, and the category's average expense ratio runs below 1%.¹⁶

One caution, because it is the real risk now: access is not outcome. Daily liquidity makes it easy to buy an alternative after a strong crisis year and sell it during a flat one — exactly backwards.

Ask what makes it move. If the answer is the same as for stocks, it is not diversification.

NUMBER 6

The floor: a different kind of uncorrelated asset

Fixed annuities and fixed cash-value life insurance belong here as **uncorrelated assets** rather than as an asset class. What changes the behavior is the **floor**: the contract takes part of the index's gain and none of its loss. Below is a hypothetical contract crediting 60% of the S&P 500's annual price movement, 0% floor, no cap, 2000 through 2025.

\$100,000, 2000–2025	S&P 500 PRICE	S&P 500 TOTAL RETURN	HYPOTHETICAL FIA
Average annual return	7.68%	9.69%	7.18%
Actual compounded return	6.10%	8.07%	7.00%
Standard deviation	17.61%	17.97%	6.41%
Losing years, of 26	8	6	0
Sharpe ratio — return per unit of risk	0.29	0.40	0.73
Return if risk were held equal	4.38%	5.06%	7.18%

Hypothetical. Sharpe computed against a 2.50% risk-free rate. The final row blends each index with that rate until its standard deviation matches the contract's 6.41% — the arithmetic of the Sharpe ratio, not a strategy anyone ran. No actual contract is represented.

The **Sharpe ratio** is return per unit of risk taken, and it settles the argument: **0.73** against 0.40 is roughly *eighty percent more return for every unit of risk* than the index it references.

Then read the last row twice. Dial the index down to the contract's volatility and it returns **5.06%** while the contract returns **7.18%**. Risk you never took is return you never have to earn back.

One precision: the contract's correlation to the index is 0.89 — but its beta is 0.32. The floor changes the size of the move, not its direction.

The floor doesn't remove the market. It removes the half of it you were afraid of.

NUMBER 7

Why this is about risk, not about return

The case for real diversification is often mis-sold as a case for higher returns. It is not. It is a case for *less risk per unit of return* — and in retirement, when withdrawals are running, that is the more valuable of the two.

Harry Markowitz won a Nobel Prize for the underlying insight: combining assets that do not move together produces a portfolio whose risk is lower than the average risk of its parts. Plot every possible combination and the best of them trace a curve — the *efficient frontier*. Adding a genuinely uncorrelated asset pushes that curve up and to the left: more return for the same risk, or the same return for less.

In 1983 the Harvard finance professor John Lintner found that portfolios of stocks combined with judicious investments in managed futures were significantly less risky than portfolios of stocks alone, or of stocks and bonds.⁸ The long-run figures still support it: from 1980 to 2010 the Barclay CTA Index carried a correlation to the S&P 500 of roughly **+0.01**, at a standard deviation of 7.28% against 16.60%.⁹

Less risk does not have to mean less return

"Lower risk" is usually heard as "lower return." It need not be. A 2025 Ernst & Young study ran 1,000 Monte Carlo scenarios on a 65-year-old couple with \$950,000, comparing an investment-only portfolio against one holding 30% in a fixed indexed annuity. Holding income *identical* at \$68,779, the investment-only plan succeeded in 90.0% of scenarios; the integrated plan succeeded in **95.5%** and left a median legacy **25.6% larger**.¹⁷

Same income, better odds of getting it, more left over. EY also stress-tested a 50% cut to Social Security: the investment-only plan fell to 69.2% while the 30% FIA plan held at 79.1%.¹⁷

Diversification is not a way to earn more. It is a way to need less luck.

A CLOSER LOOK

The other side of the ledger

Everything on pages 06 and 07 carries a cost. An educational organization that lists the benefits and stops has sold you something. Here is what the previous pages leave out.

Managed futures had a lost decade.

The 2008 and 2022 results are real. So is the stretch between them: roughly ten years of annualized returns under 2%, with a drawdown approaching 22%, while an S&P 500 index fund compounded at about 13% a year.¹⁰ An asset that pays off in crises will look like dead weight, expensively, for years at a time.

Some low correlations are an illusion.

Private equity and private real estate are typically valued quarterly, often by model rather than by transaction. Infrequent marks produce artificially smooth return streams with understated volatility and understated correlation — what AQR's Cliff Asness named "volatility laundering."¹¹ One study concluded that after unsmoothing, private equity's risk-adjusted returns were comparable to those of public equities.¹² The risk did not shrink; someone stopped photographing it.

The endowment model has not been a free lunch.

A 2026 study of the seventeen largest U.S. endowments found that despite heavy allocations to alternatives, 86% of their risk still came from equity factors, and their risk-adjusted returns trailed the Canadian pension peer group.¹³ Earlier academic work found most endowments did not out-earn a plain 60/40 on a Sharpe-ratio basis.¹⁴

Costs and liquidity are real constraints.

Many of these vehicles carry layered fees, lock-up periods, surrender charges, capital calls, or K-1 tax reporting. A diversification benefit consumed by fees is not a benefit, and an asset you cannot sell when you need money is a problem however well it correlates.

Complexity has its own risk.

An investor who does not understand what they own tends to sell it at the worst moment. The best-designed portfolio you will abandon in a panic is worse than a simpler one you can hold.

IN PRACTICE • CASE STUDY ONE

Two portfolios that looked identical

HYPOTHETICAL ILLUSTRATION — NOT AN ACTUAL CLIENT

Walter and Diane each retired at the end of 2007 with **\$1,000,000**. Both had been told to diversify. Both believed they had.

Walter's advisor split his equities five ways and paired them with bonds — seven line items, 60/40. Diane held the same 60% in stocks but split the rest, 20% bonds and 20% managed futures. Applying the 2008 index returns from page 03:

CALENDAR YEAR 2008	WALTER 60/40	DIANE 60/20/20
Equities (blended, five categories)	60%	60%
Bonds	40%	20%
Managed futures	—	20%
Portfolio return	-22.3%	-20.5%
Value at December 31, 2008	\$777,400	\$795,100

Hypothetical. Assumes a blended equity return of -40.6% (equal weight across the five 2008 category returns on page 03), bonds +5.24%, managed futures +14.09%; no fees, taxes, rebalancing or withdrawals.

The gap is **\$17,700** — real, but modest, and worth being honest about. The reason it is modest is the whole lesson: *2008 was a year bonds worked*. Walter's second basket did its job, so the third basket only had to beat it.

What the number actually shows. Walter's five equity categories contributed nothing to one another. Every dollar of protection came from the bond sleeve alone: he held seven positions and owned *two ideas*. Diane held seven and owned three. Turn the page for the year that difference stopped being modest.

IN PRACTICE • CASE STUDY TWO

The year the second basket failed

HYPOTHETICAL ILLUSTRATION — NOT AN ACTUAL CLIENT

2008 was a crisis bonds were built for. 2022 was not — which is what makes it the more useful year to study. Same two investors, same \$1,000,000 each, same allocations.

CALENDAR YEAR 2022	RETURN	WALTER 60/40	DIANE 60/20/20
S&P 500, total return	-18.1%	60%	60%
Bloomberg U.S. Aggregate Bond	-13.0%	40%	20%
SG Trend Index (managed futures)	+27.3%	—	20%
Portfolio return		-16.1%	-8.0%
Value at December 31, 2022		\$839,300	\$919,900

Hypothetical. Index returns for calendar 2022;^{4,6} no fees, taxes, rebalancing or withdrawals. Indices are unmanaged and not available for direct investment.

This time the gap is **\$80,600** — more than four and a half times the 2008 gap, from the identical allocation. Nothing about Diane's portfolio changed. What changed was that Walter's bonds, the one thing carrying all of his protection, fell 13% in the worst year the index has ever had.

The honest reading. This is not a claim that managed futures will rise in the next downturn. They will not always, and the ten years between these two episodes were unrewarding (page 09). The claim is narrower and sturdier: a two-basket portfolio is exposed to any shock that empties both baskets at once, 2022 proved such shocks are not hypothetical — and the cost of being wrong showed up in a single year.

THE BOTTOM LINE

Allocated is not the same as *diversified.*

A statement with nine line items feels safer than one with three. It may not be. The number worth knowing is not how many funds you own — it is how many genuinely different things have to go wrong before all of them fall at once.

For most portfolios the answer is two: an economy that disappoints, or an inflation shock that lifts rates. Everything else is a variation on those two.

TWO HONEST QUESTIONS WORTH SITTING WITH

- If every stock market on earth fell 35% next year, how much of your portfolio would be unaffected? —
- Do you know the difference between how your money is divided and how it is diversified? —



About The Retirement Institute

The Retirement Institute is a non-profit dedicated to financial education for those approaching and living in retirement. We publish clear, unbiased guides on the subjects that matter most — taxes, income, healthcare costs, and legacy — so decisions come from knowledge rather than fear. We don't sell products. We teach.

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Diversification and asset allocation do not ensure a profit and do not protect against loss in a declining market. Investing involves risk, including possible loss of principal. Correlations between asset classes change over time and have historically increased during periods of market stress. Alternative investments — including managed futures, commodities, private equity, and private real estate — may involve substantially higher fees, leverage, limited liquidity, lock-up periods, capital calls, complex tax reporting, and reduced transparency, and are not suitable for all investors. Reported volatility and correlation figures for infrequently valued assets may understate actual risk. Fixed annuities and fixed cash-value life insurance are insurance products, not securities, and are not FDIC insured; any guarantees, floors, caps, and participation rates are subject to the claims-paying ability of the issuing insurer. Indexed products do not directly participate in any equity index or its dividends; crediting is limited by caps, spreads, and participation rates, and these contracts carry costs, surrender charges, and limitations on access to principal. Past performance does not guarantee future results. Indices are unmanaged, do not reflect fees or expenses, and are not available for direct investment.

¹ Sources referenced in this guide include: Minnesota Legislative Commission on Pensions and Retirement, asset class return memorandum (2000–2009 index returns and correlation observation); ² research on rolling pairwise correlation across S&P 500 sector constituents, 2000–2026; ³ Morningstar, "International Diversification Is Finally Paying Off" and "Where International Diversification Works—and Where It Falls Short"; ⁴ index total returns for calendar 2022 and rolling stock-bond correlation analysis, 1975–2026; ⁵ Morgan Stanley Investment Management, historical U.S. equity and bond correlation study (60/40 performance since 1820); ⁶ Société Générale CTA and Trend index performance review, 2022; ⁷ State Street Global Advisors, "60/40 strategy regains strength" (October 2025); ⁸ John Lintner, "The Potential Role of Managed Commodity-Financial Futures Accounts in Portfolios of Stocks and Bonds," Harvard University (1983); ⁹ BarclayHedge / Barclay CTA Index statistics, January 1980–November 2010; ¹⁰ analysis of SG Trend Index returns across the 2009–2019 period; ¹¹ Cliff Asness (AQR) on return smoothing, as reported by Morningstar, "Volatility Laundering: How Private Equity Funds Understate Their Investments' Risk" (2025); ¹² Nicolas Rabener, "Private Equity Is Still Equity, Nothing Special Here," Journal of Investing (December 2020); ¹³ Chartered Alternative Investment Analyst Association, "US Endowment Study: Top 17 Funds Asset Allocation, Risk, and Risk-Adjusted Returns" (May 2026); ¹⁴ CAIA, "Alpha and Performance Efficiency of Ivy League Endowments"; ¹⁵ BlackRock, "What are liquid alternatives"; ¹⁶ industry coverage of 2025 liquid-alternative ETF launches and category expense ratios; ¹⁷ Ernst & Young LLP, "Holistic planning: Integrating insurance products for better outcomes in retirement" (2025 study), Tables 9 and 13. Figures cited are as reported by those sources; verify against the current edition before relying on them.