

CLIENT EDUCATION · RETIREMENT INCOME PLANNING

# Income in Retirement:

## Why Timing Matters

Understanding sequence-of-returns risk when taking portfolio withdrawals

Two retirees can earn the **same long-term return** in the same market and walk away with **completely different outcomes**. The difference is not skill, fees, or strategy. It is the **order in which the returns arrive** — and whether the retiree is taking withdrawals when the market is down. This is **sequence-of-returns risk**, and it is one of the most important concepts in retirement income planning.

### Same return stream. Same starting value. Different cash-flow outcome.

When you are still building wealth, the order of annual returns rarely matters — only the long-run compounded return. Once you start withdrawing money, that changes. **Bad early years force you to sell into a down market**, leaving fewer assets to participate in the eventual recovery. A long bull market that arrives later may not be enough.

### What is sequence-of-returns risk?

**Sequence-of-returns risk** (or simply **sequence risk**) is the danger that the order of investment returns — not just their average — will permanently impair a retirement portfolio. The risk is highest in the early years of retirement, when the portfolio is largest and withdrawals begin.<sup>2</sup> When negative returns coincide with withdrawals, shares are sold at depressed prices, and fewer assets remain to recover.<sup>3</sup>

### What this brochure shows

In the pages that follow, we use a hypothetical \$500,000 portfolio invested to track the S&P 500's annual total returns from 2000 through 2017—an 18-year window that happens to begin with two major bear markets.<sup>1</sup> The same return stream is used in every scenario; only the **cash-flow assumptions** and the **order of returns** change.

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##### The original example

Two \$500,000 portfolios over 2000–2017: one untouched, one funding a 5% withdrawal indexed to inflation.

#### PAGE 3

##### What if the order flipped?

Same withdrawals, same 18 returns — but with the strong years first and the bear markets last.

#### PAGE 4

##### Planning considerations

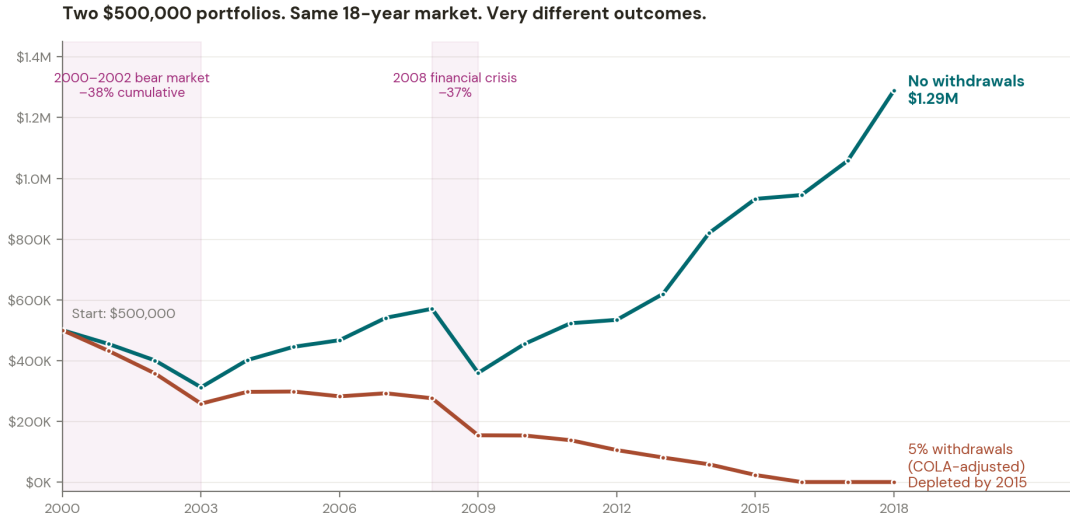
Liquidity reserves, flexible withdrawals, and other ways advisors help retirees manage this risk.

Sources on this page: <sup>1</sup> S&P 500 annual total returns 2000–2017 from [Slickcharts](#). <sup>2</sup> [Investopedia](#), “Sequence Risk”. <sup>3</sup> [Morningstar](#), “Sequence Risk During Retirement”. A complete source list and disclosures appear on page 4.

THE ORIGINAL EXAMPLE

# 2000–2017: With and without withdrawals

Both portfolios start with **\$500,000** and earn the same S&P 500 total returns each year, with dividends reinvested.<sup>1</sup> One portfolio is left alone. The other funds annual living expenses, beginning at **\$25,000** in year 1 and increasing **3% per year** for cost-of-living adjustments — a steady 5% starting withdrawal indexed to inflation.



**Hypothetical illustration.** Annual S&P 500 total returns, 2000–2017. Withdrawals are applied at the start of each year, before the annual market return, and capped at the available balance. Past performance does not guarantee future results.

<p>NO WITHDRAWALS — FINAL</p> <p><b>\$1.29M</b></p> <p>+158% over 18 years</p>	<p>5% WITHDRAWALS — FINAL</p> <p><b>~\$0</b></p> <p>Depleted in year 16 (2015)</p>	<p>ANNUALIZED RETURN (CAGR)</p> <p><b>5.4%</b></p> <p>Same for both portfolios</p>
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## Why the same market produced two different futures

**Early losses compound.** The 2000–2002 bear market reduced the no-withdrawal portfolio by about **38% cumulatively**. Withdrawals during that drawdown forced share sales at depressed prices, leaving fewer assets to participate in the 2003 and later recovery.<sup>2</sup>

**The 2008 crash hit a smaller base.** By 2008, the withdrawal portfolio had already shrunk. A –37% return on a depleted portfolio is mathematically harder to recover from than the same return on a full balance.<sup>3</sup>

**Average return is not realized return.** Both portfolios experienced the same **5.4% annualized return (CAGR)<sup>a</sup>** over 18 years. With no cash flows, the untouched portfolio nearly tripled. With withdrawals taking place during the early bear markets, the second portfolio ran out of money in 2015 — before the market’s strong 2016–2017 finish could help.<sup>3</sup>

**The takeaway:** when withdrawals are happening, the order of returns is at least as important as the average.

<sup>a</sup> CAGR = compound annual growth rate; the steady annualized rate that links the starting and ending values over the full period. COLA = cost-of-living adjustment; in this illustration, withdrawals increase 3% per year.

SAME RETURNS, DIFFERENT ORDER

# What if the bad years came last instead of first?

To isolate the impact of timing alone, we ran the same withdrawal scenario two ways. Both portfolios start at \$500,000 and use the **identical** withdrawal schedule—\$25,000 in year 1, increasing 3% annually for COLA, applied before the market return and capped at the available balance. They use the **same 18 annual returns**. The only difference is the **order** in which those returns arrive.



**Hypothetical sequence—order illustration.** Same 18 S&P 500 annual total returns; same \$500,000 starting value; same withdrawal schedule. The x-axis shows Year 1 through Year 18 to emphasize that the reversed sequence does not represent any actual calendar period. Past performance does not guarantee future results.

### Bad years first (actual 2000–2017)

#### \$0 final balance

Total withdrawn: **\$488,234** · depleted in year 16

Three losing years at the start (–9%, –12%, –22%) combined with withdrawals shrank the portfolio by more than a third before the recovery began. The 2008 crash arrived on an already-reduced base. The portfolio ran out of money before the market's strong finish could help.

### Good years first (returns reversed)

#### \$605K final balance

Total withdrawn: **\$585,361** · no depletion

Strong early years (+22%, +12%, +1%, +14%, +32% over the first five) built a cushion before the losses arrived. The portfolio absorbed the same downturns later, when the base was larger and fewer years of withdrawals remained.

The **average** annualized return is identical across both scenarios. Only the **order** changes. With withdrawals in the picture, that order can decide whether the portfolio keeps compounding or runs out of money.<sup>3</sup>

Sources: <sup>1</sup> Slickcharts S&P 500 Total Returns. <sup>3</sup> Morningstar, "Sequence Risk During Retirement". Calculation based on stated assumptions. Full sources and disclosures on page 4.

## PLANNING CONSIDERATIONS

# Designing a withdrawal strategy that can adapt

Sequence risk is not about predicting the next bear market. It is about building a plan that can **absorb a difficult first decade** without forcing share sales at the worst possible moment. A few common building blocks:

## Liquid reserve / cash & short-term bonds

Hold near-term spending needs — often described as **six months to two years of living expenses** — in highly liquid, stable assets such as CDs, money market funds, and short-term bonds. The goal is to avoid being forced to sell long-term investments when prices are at a low ebb.<sup>4</sup>

## Flexible withdrawals

In an unlucky first few years, consider **reducing withdrawals or skipping inflation adjustments**. Frameworks such as guardrail or dynamic-spending rules formalize this. Modeling shows even modest spending flexibility can meaningfully extend portfolio longevity.<sup>3</sup>

## Diversified income sources

Layering Social Security, any pension, annuity income, and dividend or interest income reduces how much must come from selling portfolio assets in any one year — lowering exposure to a bad sequence in equities. The goal is to reduce reliance on selling portfolio assets during a market downturn.

## Disciplined rebalancing

A pre-committed rebalancing rule trims what has held up and adds to what has fallen. A consistent process can help keep the portfolio aligned with its intended risk level through changing markets.

**The plan, not the prediction.** Sequence risk is not about forecasting the next bear market. It is about building a withdrawal strategy that can **adapt** when the first years of retirement are difficult.

## Sources

<sup>1</sup> Slickcharts, "S&P 500 Total Returns by Year." [slickcharts.com/sp500/returns](https://slickcharts.com/sp500/returns)

<sup>2</sup> Investopedia, "Sequence Risk: Meaning, Retirement, and Protection." [investopedia.com/terms/s/sequence-risk.asp](https://investopedia.com/terms/s/sequence-risk.asp)

<sup>3</sup> Morningstar, "Sequence Risk During Retirement." [morningstar.com/columns/rekenthaler-report/sequence-risk-during-retirement](https://morningstar.com/columns/rekenthaler-report/sequence-risk-during-retirement)

<sup>4</sup> Morningstar, "A Tax-Smart Plan for In-Retirement Withdrawals in 3 Steps."

[morningstar.com/retirement/tax-smart-plan-in-retirement-withdrawals-3-steps](https://morningstar.com/retirement/tax-smart-plan-in-retirement-withdrawals-3-steps)

## Definitions and assumptions

**CAGR** = compound annual growth rate; the steady annualized rate that links the starting and ending values over the full period.

**COLA** = cost-of-living adjustment; in this illustration, withdrawals increase 3% per year.

**Assumptions:** \$500,000 starting value; withdrawal scenarios begin at \$25,000 in year 1, increase 3% annually for COLA, are applied at the start of each year before the annual market return, and are capped at the available balance. Reversed-order scenario uses the same 18 annual returns in reverse chronological order to isolate the effect of return sequencing.

## Disclosure

**For educational purposes only.** Hypothetical illustration using historical S&P 500 total returns; does not represent any specific investment or guarantee future results. **Past performance does not guarantee future results.** Current performance may be higher or lower than the performance quoted. Scenario results are calculations based on the stated assumptions.