



TECHNICAL BRIEFING

Fixed Indexed Annuities and the Pension Strategy

A synthesis of institutional retirement income research from T. Rowe Price, BlackRock, and AllianceBernstein.

For readers who want the mechanics and modeling - not a simplified pitch.

Research at a Glance

This briefing synthesizes findings from three institutional research papers examining Fixed Indexed Annuities (FIAs) in retirement portfolio design. It is written for readers who want the underlying mechanics and modeling. If you want to see the math before the marketing, this is for you.

72%

FIA-enhanced 60/40 portfolio outperformance across 10-year accumulation simulations.

98.6%

Pension Strategy portfolio outperformance on retirement spending.

12.3%

Improvement in sustainable annual spending at a 90% success threshold.

60%

Reduction in the probability of falling below a modeled portfolio floor.

What the research consistently suggests

FIAs appear most effective when they replace part of the fixed-income allocation, protect against poor early outcomes, and are paired with a drawdown strategy that genuinely benefits from a lifetime-income hedge.

Briefing map

- 01 Sequence risk and the retirement red zone
- 02 Endowment versus drawdown frameworks
- 03 Why a deferred annuity can complement drawdown
- 04 FIA mechanics: caps, participation rates, and liquidity
- 05 Accumulation and income-phase simulation findings
- 06 Volatility-controlled crediting, constraints, and conclusions

01 | THE RETIREMENT RED ZONE

The Core Problem: Sequence of Returns Risk

Every retirement portfolio faces a timing problem that has nothing to do with average returns and everything to do with the order those returns arrive in. Two portfolios can post identical average annual returns over 30 years and produce wildly different outcomes, depending on whether the losses show up in year one or year twenty-five.



The danger window sits roughly ten years on either side of an investor's retirement date. A retiree who is also making withdrawals during a market downturn is forced to sell depreciated assets to fund income. That compounds the damage in a way that pre-retirees, who are still contributing, do not experience.

Why the order matters. During accumulation, a later recovery can repair an early loss because no money is leaving the account. During distribution, withdrawals permanently remove shares before the recovery arrives. The portfolio must then recover from both the market decline and the capital already spent.

Institutional modeling consistently identifies this red zone as the single highest-leverage period to address with portfolio design, rather than trying to repair the damage later with income adjustments.

The planning implication

The objective is not to predict the next downturn. It is to reduce the amount of essential retirement income that depends on selling volatile assets at an unfavorable time.

02 | WITHDRAWAL DESIGN

Two Decumulation Frameworks

Retirement income research generally splits withdrawal strategy into two camps: endowment and drawdown. Neither is objectively superior in isolation. The more useful question is how each framework interacts with a lifetime-income guarantee.

Endowment Strategy

Draws income primarily from portfolio returns, leaving principal largely intact.

- **Primary strength:** Preserves a more stable account balance.
- **Primary trade-off:** Income is constrained by what the portfolio earns.
- **Longevity profile:** Principal preservation already provides a built-in hedge.

Drawdown Strategy

Draws income from both principal and returns, gradually depleting the account over the retirement horizon.

- **Primary strength:** Can support higher current income.
- **Primary trade-off:** Reintroduces the risk of exhausting the portfolio.
- **Longevity profile:** Benefits directly from a separate lifetime-income hedge.

The key interaction

An endowment strategy already hedges longevity risk by preserving principal. Adding an annuity may duplicate protection. A drawdown strategy has no such built-in hedge, which is exactly where a lifetime-income guarantee can add the most value.

Why this distinction matters

The question is not simply, "Should a retiree own an annuity?" The better question is, "What job would the annuity perform inside the withdrawal strategy?" When the portfolio is intentionally drawn down, the annuity can absorb the longevity risk that the portfolio no longer covers on its own.

03 | T. ROWE PRICE MODELING

Why Deferred Annuity + Drawdown Stands Out

T. Rowe Price’s retirement research group compared several pairings using a hypothetical 65-year-old retiree with a \$500,000 balance over a 30-year horizon.

Configuration	Portfolio / Annuity	Annual Income	Research takeaway
Endowment + immediate annuity	60 / 40	\$30,000	Highest steady income, but an immediate 40% liquidity reduction.
Endowment + deferred annuity	85.71 / 14.29	\$21,430	Lowest income and potential under-spending as unused assets accumulate late in retirement.
Drawdown + deferred annuity	80 / 20	\$30,000	Comparable income with a temporary liquidity dip that reverses when deferred payments begin around year 15.



The underlying logic: the drawdown portfolio is allowed to do what it does best - support higher early spending - while the deferred annuity is reserved for the later years when longevity risk becomes most difficult for a finite portfolio to bear.

A drawdown strategy has no built-in longevity hedge. That is why an annuity’s guarantee can add protection without paying twice for the same outcome.

04 | CONTRACT MECHANICS

How Fixed Indexed Annuities Work

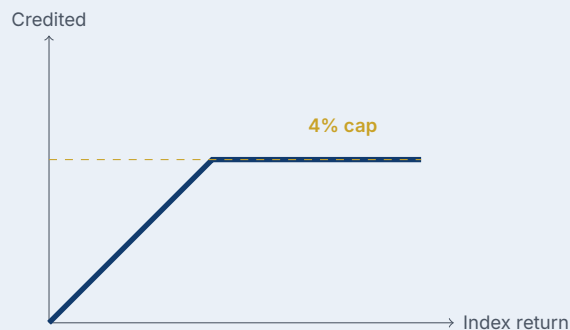
An FIA is a contract between the client and an insurance carrier. The client transfers a lump sum, and the carrier credits interest based on the performance of a chosen index, most commonly the S&P 500 Price Return Index, though multi-asset and volatility-controlled indices are increasingly common.

At maturity or during the accumulation period, the client receives principal plus any credited gains. Losses in the underlying index do not reduce the contract value; the worst indexed-crediting result is generally a zero-gain period, subject to contract terms and the issuing carrier's claims-paying ability.

Index Cap

The maximum credited return in a given period, regardless of how far the index climbs.

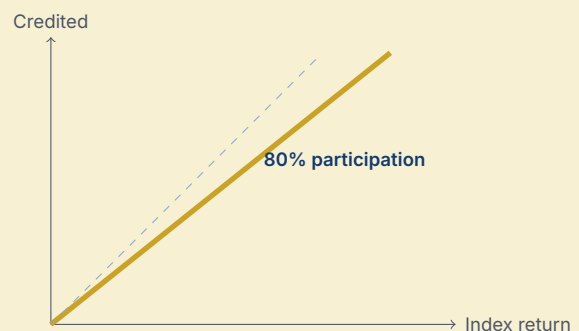
Example: a 4% cap credits 4% even if the index rises 15%.



Participation Rate

The percentage of index gains credited to the contract, often without a hard cap. **Example:**

80% participation on a 10% gain credits 8%.



Liquidity and repricing. Crediting rates fluctuate with the index, interest rates, and market volatility. Carriers may reset caps and participation rates periodically. Surrender schedules typically run five to ten years, with penalty-free partial withdrawals - commonly 10% annually - usually available.

05 | ACCUMULATION PHASE

Quantifying the Case: Accumulation Findings

BlackRock modeled a 40/60 equity/fixed-income portfolio using 5,000 Monte Carlo paths. The study compared a 30% FIA allocation funded either proportionally from the whole portfolio or entirely from the fixed-income sleeve.

+2%

Median portfolio value when the FIA replaced fixed income.

+6%

Improvement in the modeled 5th-percentile outcome.

-60%

Probability of falling below a \$900K portfolio floor.

BlackRock: funding source changes the outcome

- **Median outcome:** When funded from fixed income, median portfolio value increased roughly 2% versus the no-FIA baseline - about \$20,000 on a \$1 million portfolio. Prorated funding slightly reduced the median because the FIA displaced higher-expected-return equity exposure.
- **Downside protection:** The 5th-percentile outcome improved roughly 6% under prorated funding, an estimated \$53,000 cushion on \$1 million. The probability of falling below a \$900,000 floor dropped by 60% under prorated funding and 20% under fixed-income funding.
- **Conservative portfolios:** A 10/90 equity/fixed-income portfolio improved in both median and worst-case outcomes when an FIA replaced part of cash and fixed income, assuming liquidity needs were already met elsewhere.

AllianceBernstein: the FIA as part of the bond sleeve

The study compared a standard 60/40 portfolio with a version that shifted half the bond allocation - 20% of the total portfolio - into an FIA.

10-year result: the FIA-enhanced portfolio outperformed the standard 60/40 in **72% of simulations**. Its average winning margin was 3.9%, compared with a 2.1% average losing margin when it underperformed. Under a low-bond-yield stress test, the win rate rose to **92.4%**.

06 | INCOME PHASE

The Pension Strategy in Retirement

AllianceBernstein extended its analysis to a 40-year horizon: 10 years of accumulation followed by 30 years of withdrawals. The comparison placed a standard 60/40 portfolio against an FIA-enhanced portfolio with an optional guaranteed lifetime income rider - what we refer to here as the Pension Strategy.



Safe-spending level modeled at a 90% probability of not running out of money



The rider is not free. In accumulation-only comparisons, the rider-equipped portfolio beat the standard 60/40 only 44.1% of the time at baseline bond yields. Rider fees and a reduced cap rate can drag on growth before income begins. The rider is priced for the income phase and should be evaluated on that basis.

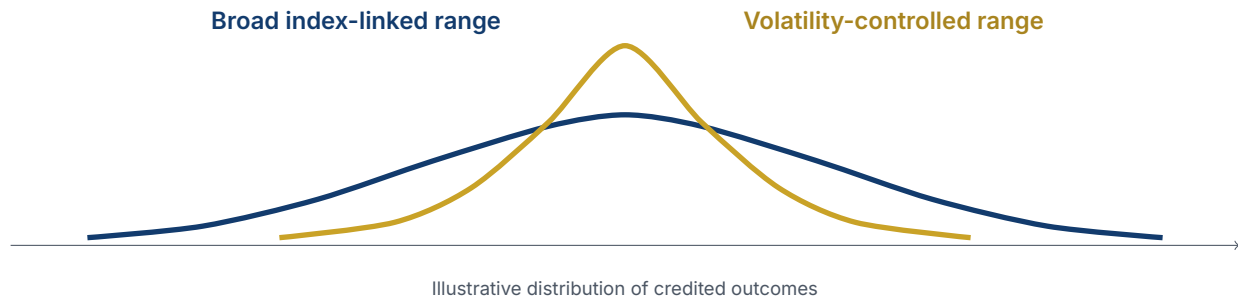
The right performance question

For a lifetime-income rider, the relevant metric is not simply, “Did the account grow as much as a market portfolio?” It is, “How much sustainable retirement spending did the combined strategy support, with what probability of success?”

07 | CREDITING DESIGN

Volatility-Controlled Crediting

BlackRock also examined FIAs benchmarked to volatility-controlled indices rather than directly to the S&P 500. These indices use built-in tactical allocation mechanisms to target a more stable level of realized volatility, typically far below the 14.9% expected volatility assumed for the S&P 500 Price Index in the base case.



The practical effect is a narrower and more predictable distribution of credited returns.

- **Lower-bound outcome:** At a 30% allocation, a volatility-controlled index FIA improved the portfolio's lower-bound result more aggressively than a standard S&P-linked FIA with an equivalent cap.
- **Upper-bound outcome:** When paired with a participation-rate structure rather than a hard cap, the strategy also improved upper-bound outcomes by capturing more of positive index performance.
- **Core trade-off:** Lower expected return in exchange for tighter, more predictable outcomes.

Useful for certainty-first clients

Volatility-controlled crediting may be most useful when a client places greater value on a narrower range of outcomes than on maximizing the ceiling in unusually strong market years.

08 | SUITABILITY AND CONSTRAINTS

What the Research Does Not Solve

None of the modeling should be read as a claim that FIAs provide free upside. The trade-offs are real and must be addressed explicitly.

Illiquidity during the surrender period. Withdrawals beyond the penalty-free allowance can trigger surrender charges. Full access to principal may be delayed for years, sometimes a decade.

Rider costs reduce accumulation. A lifetime-income rider can reduce cap rates and contract growth before income begins. The income guarantee must be worth more to the client than the foregone growth potential.

Guarantees depend on the issuer. FIA guarantees, including income riders, are backed by the claims-paying ability of the issuing insurance company. They are not backed by a broker-dealer or a federal government agency. State guaranty associations provide only secondary protection and only within statutory limits.

Crediting terms can change. Caps and participation rates are not necessarily fixed for life. Carriers may reset them based on interest rates, volatility, and product economics.

This is not a universal recommendation. The cited modeling excludes taxes, inflation, and individualized circumstances. Suitability is a case-by-case determination, not a formula.

Practical standard: establish emergency liquidity and near-term spending reserves before allocating assets to a long-term annuity contract. The strategy should solve a clearly identified income or risk-management need.

09 | CONCLUSION

Bottom Line

Across three independent research efforts - from a mutual fund manager, a global asset manager, and an active manager with an annuity-focused product lens - the same pattern holds:

Properly funded FIAs can reduce tail risk and materially increase sustainable retirement income.

The strongest use case appears when the FIA replaces part of the fixed-income sleeve, liquidity needs are met elsewhere, and a lifetime-income rider is matched to a drawdown strategy that needs a longevity hedge.

The cost is real: reduced liquidity, rider fees, and capped or limited upside in strong market years. For the right client and the right funding source, the research suggests that cost is frequently worth paying.

A disciplined decision framework

1. Identify the essential-expense income gap.
2. Set aside adequate liquid reserves before committing long-term assets.
3. Determine which portfolio assets can be reassigned without displacing needed equity growth.
4. Compare the guarantee on sustainable spending, not merely on accumulation value.
5. Evaluate issuer strength, surrender terms, rider fees, caps, participation rates, and contract-specific provisions.

Schedule a Free Call

See how these mechanics apply to your specific retirement income numbers.

This conversation is educational and does not constitute investment, tax, or legal advice.

SOURCES AND LEGAL DISCLOSURES

Research Reviewed

1. **T. Rowe Price.** *Drawdown with Annuities Can Balance Retirement Income and Liquidity.* In the Spotlight, October 2024.
2. **BlackRock.** *Retiring with Confidence: A Case for Fixed Indexed Annuities.* RGR1H1021U/S-1757214, 2021.
3. **AllianceBernstein.** *The Fixed Index Annuity: A New Core for Retirement Saving?* April 2021.

Disclosures

This material is for educational and informational purposes only and does not constitute investment, tax, or legal advice. It is not a recommendation to purchase any specific annuity product.

Annuity guarantees, including any income rider, are backed solely by the claims-paying ability of the issuing insurance company. In Texas, annuity contracts are also subject to the coverage limits of the Texas Life and Health Insurance Guaranty Association (TLHIGA), a secondary protection that applies only up to statutory limits and only in the event of insurer insolvency.

Fixed Indexed Annuities are long-term contracts with surrender charges that apply during the surrender period. Withdrawals in excess of penalty-free allowances, and withdrawals prior to age 59½, may be subject to surrender charges and tax penalties.

This material summarizes third-party research. Individual results will vary, and past modeled performance does not guarantee future results.

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