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The Five-Dimensional Cost of Executive Benefits

What Credit Union Boards See, and What They Miss



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How Boards Make This Decision

Most credit union boards evaluate executive benefit proposals the same way. The board reviews two or three structures, typically a 457(f) plan and some version of collateral assignment split dollar, and compares them on a handful of metrics: projected benefit at retirement, death benefit at life expectancy, impact on earnings, and some version of "cost recovery" at termination.

The analysis usually concludes that one structure is obviously better than the other. The board approves, the structure gets implemented, and ten or twenty years later, the balance sheet tells a different story than the initial review suggested.

This piece is about why those stories diverge.

The short answer is that executive benefit proposals are almost always evaluated on what shows up in the financial statements, primarily the impact on earnings and balance sheet treatment. The actual institutional impact plays out across five dimensions: how the structure reports on the financial statements (one qualitative dimension), plus four quantitative dimensions that complete the analytical picture. Those four are the present value of cost, opportunity cost of capital deployed, interest rate risk exposure, and duration of capital commitment.

NCUA's examiner guidance directs enhanced board oversight for investments funding senior executive benefits and warns boards specifically about evaluating plans presented as "zero cost" without accounting for lost earnings potential and negative scenarios. The five-dimensional framework presented here operationalizes that standard.

The purpose of this analysis is not to recommend a structure. It is to make the five-dimensional cost picture visible so boards can make a clear decision.



The Case Study

To make this concrete, we'll use a defined-benefit executive plan common to credit unions:

- ✓ Executive currently age 50, target retirement at age 62 (12 years to vest)
- ✓ Target post-retirement income of \$100,000 per year, tax-free equivalent, for 20 years
- ✓ Executive's marginal tax rate: 40%
- ✓ Credit union discount rate: 5.78% (long-term corporate yield)

The present value of the target benefit at retirement, after-tax equivalent, is \$1,235,258. For a 457(f) plan, this must be grossed up for the executive's ordinary income tax, producing a \$2,058,763 pre-tax obligation at vesting. For credit unions subject to §4960, a 21% excise tax applies to compensation above \$1 million paid to a covered employee, adding \$432,340 of cost at vesting.

A note on the §4960 calculation: for simplicity, this analysis assumes the entire 457(f) benefit is treated as compensation above the \$1 million threshold. This is consistent with how the calculation works when an executive's other compensation already exceeds \$1 million, which is common for the senior executives these structures typically target. Institutions running this analysis on specific executives should compute §4960 exposure based on their actual compensation structure.

This is the defined benefit the board has committed to deliver. The question is how to fund it.

The Five Structural Options

We evaluate five structures against the same target benefit.

- ✓ **Unfunded 457(f) with level accrual.** No upfront capital deployed. The CU expenses the benefit proportionally over the vesting period, funding from general operating cash at vesting.
- ✓ **Funded 457(f) with match-funded lump sum.** At plan inception, the CU deploys capital into a duration-matched instrument sized so the asset grows to equal the obligation at vesting.

- ✓ **Funded 457(f) with match-funded level contributions.** Same end state, but contributions are made annually over the vesting period rather than as a single lump sum.
- ✓ **Funded 457(f) with wash offset.** CU deploys larger upfront capital into an income-producing asset whose annual earnings exactly offset the expense accrual, producing a perfectly smooth income statement during vesting.
- ✓ **Collateral Assignment Split Dollar, also called Loan Regime Split Dollar (LRSD).** CU advances premium to a life insurance policy treated as a loan to the executive. The executive draws tax-free retirement income from policy loans. The CU recovers its loan balance and share of excess death benefit at the executive's death.

Dimension One: What Boards Typically See — The Financial Reporting View

Most executive benefit decisions are framed around two financial reporting views: how the structure appears on the balance sheet (and Call Report), and how it flows through the income statement. This is the natural entry point for board evaluation. Understanding what these views show, and what they don't, is the starting point for evaluating any proposal.

Balance Sheet and Income Statement: 457(f) Variants

For 457(f) structures, financial reporting tracks economic substance closely. Unfunded 457(f) shows up as a growing liability with no offsetting asset on the balance sheet, and the income statement shows substantial recurring compensation expense throughout the vesting period. The treatment is direct and honest, if uncomfortable. Funded 457(f) with a match-funded asset shows both the liability and the offsetting asset on the balance sheet, with investment income partially offsetting compensation expense on the income statement. Wash-offset 457(f) produces the smoothest reported earnings during accrual, since asset earnings exactly offset expense by design, though at the cost of a larger asset position on the balance sheet. In each case, financial reporting broadly reflects the economics. What a reader sees is what the credit union is doing.

Balance Sheet and Income Statement: LRSD

LRSD's financial reporting depends heavily on structural design choices that are not visible from the Call Report alone.

- ✓ **Interest treatment** is one variable. An LRSD structured with *forgiven* AFR interest creates annual imputed compensation expense under §7872, typically modest in absolute dollars but recurring throughout the loan's life. An LRSD structured with *accrued* AFR interest produces the opposite outcome: the credit union recognizes interest income on the accruing loan balance each year.
- ✓ **Recourse status** is the larger variable, and it drives accounting treatment in ways that produce different earnings patterns. Recourse LRSD (where the executive is personally liable for repayment) allows the credit union to book the loan at its outstanding balance regardless of underlying policy cash value, recognizing accrued AFR interest income smoothly each year. The resulting income statement pattern is predictable: steady positive earnings recognition throughout the arrangement's life, with a terminal event at the executive's death. Nonrecourse LRSD (where the policy is the sole source of repayment) generally must follow EITF 06–10, now ASC 715–60, which requires the loan receivable to be carried at the lesser of the contractual loan balance or the cash surrender value of the underlying policy. When the loan balance exceeds the policy's cash value, which is typical in early policy years, the credit union must recognize an offsetting expense annually, capping recognized asset value at collateral coverage. The result is an earnings pattern with material early-year expenses (often producing net losses), a transition period as the policy matures, positive recognition in later years, and a large terminal event at death.

What the Call Report Shows

NCUA's Call Report schedule for executive benefit funding is quite granular. Assets funding employee benefit plans have dedicated account codes: Securities (789C), Other Investments (789D), Split Dollar Life Insurance Collateral Assignment (789E), Split Dollar Life Insurance Endorsement (789E1), Other Insurance (789E2), and Other Non-insurance (789F).

The schedule separately captures remaining premiums, cash surrender value, and recorded value. All of these sum into Account 789G, which represents the credit union's total \$701.19(c) position. At this level of disclosure, the credit union is explicitly identified as holding specific types of executive benefit funding in specific amounts. A reader can see what the credit union owns.

What the Financial Reporting View Doesn't Show

What the financial statements (Call Report and conventional statements alike) do not show is equally important.

They do not display **the weighted average life** of these positions. A 30+ year LRSD receivable has a fundamentally different duration profile than a 7-year investment portfolio or a 12-year match-funded asset, yet both appear at recorded value with no differentiation.

They do not display **interest rate sensitivity under shock scenarios**. Examiners measure this through the separate NEV Supervisory Test, but it is not visible on the Call Report face.

They do not display **liquidity characteristics**: whether a position can be exited at economic value in a stressed environment, or whether it is effectively held-to-maturity by design.

They do not differentiate **recourse from nonrecourse** structures whose earnings patterns and risk profiles diverge meaningfully.

They do not differentiate the **interest accrual mechanism** that drives whether the position generates non-cash income or imputed compensation expense.

On all these dimensions, a \$2,000,000 LRSD receivable and a \$2,000,000 five-year Treasury note appear identical at recorded value.

The implication for evaluation is that the financial statements identify the structures a credit union holds and the period activity those structures produce, but they do not characterize the underlying economics. A board evaluating proposals primarily on financial reporting (balance sheet asset classification, income statement smoothness, Call Report categorization) is implicitly trusting that the dimensions not displayed are also in order.

For match-funded 457(f) structures, this trust is warranted because financial reporting broadly tracks economic substance. For LRSD, the variability within the category (interest treatment, recourse status, policy design, accrual mechanism) means that financial reporting alone provides limited information about what the credit union is exposed to.

The four quantitative dimensions that follow supplement financial reporting with the analytical content needed to compare structures on economic substance.

Dimension Two: Present Value of Institutional Cost

This dimension measures the present value (PV) of the cost burden each structure imposes on the institution, at the credit union's 5.78% discount rate. The burden includes accrual-period expense recognition and terminal excise tax exposure, capturing the economic cost as it shows up over the life of the structure rather than just the terminal cash settlement.

Because each structure burdens the institution in different ways, the calculation follows the cost pattern created by that structure: for unfunded 457(f), the PV of level accrual expense plus terminal §4960 excise tax; for funded 457(f), the PV of capital deployed to satisfy the known vesting obligation; and for LRSD, the PV of premium advances net of loan recovery and any credit union share of death benefit. All metrics use the same 5.78% discount rate. The result is a board-level measure of how each structure consumes institutional resources over its life, not merely the discounted value of the terminal cash settlement.



Structure	PV Institutional Cost
Unfunded 457(f)	\$1,760,304
Funded 457(f) with match-funded lump	\$1,269,255
Funded 457(f) with match-funded level	\$1,269,255
Funded 457(f) with wash offset	\$1,269,255
LRSD	\$100,000 to \$1,358,000 (design-dependent)

Two observations stand out.

First, the three funded 457(f) structures produce identical PV institutional costs. They represent the same economic decision (commit capital today to extinguish a known future obligation) with three different funding patterns. The math converges because the terminal obligation and discount rate are the same.

Second, **the largest cost decision is whether to fund the obligation at all.** On this metric, funded 457(f) reduces the present-value cost by approximately \$491,000 compared with level-accrual unfunded 457(f). That gap should not be read as a reduction in the discounted terminal cash obligation; the terminal obligation is the same when discounted at the same rate. What funding changes is the expense pattern, balance sheet exposure during the vesting period, and institutional earnings absorbed along the way.

LRSD's direct cash-flow PV varies widely based on structural design choices: premium size, whether AFR interest accrues or is forgiven, and how any excess death benefit is allocated between the credit union and the executive's beneficiaries. Under certain designs, LRSD's direct cash-flow PV can be substantially lower than funded 457(f). If direct cash-flow PV were the only dimension, the analysis could end there. It isn't.

Dimension Three: Lost Opportunity Cost

Every dollar the credit union deploys into an executive benefit structure is a dollar not deployed elsewhere. The relevant alternative uses vary by institution (member lending, investment portfolio, balance sheet expansion capacity) but they share one feature: they typically earn a rate of return higher than the discount rate used for PV calculations.

This dimension is not an optional analytical refinement. NCUA's examiner guidance on employee benefit-related investments explicitly identifies "lost earnings potential" as a required element of board evaluation for plans presented as "zero cost" or cost-recoverable at termination. The guidance directs examiners to verify that boards evaluating such plans have accounted for all costs, including foregone earnings on deployed capital. Boards that have not examined opportunity cost across structural alternatives may not be meeting the due diligence standard NCUA articulates.

A credit union whose marginal deployed dollar earns 7% in member lending gives up real earnings when that dollar sits in an executive benefit asset earning the discount rate.

Using a 7% hurdle rate assumption (conservative for many credit unions, aggressive for others), approximate lost opportunity cost for each structure:

Structure	PV Cost	LOC	Combined
Unfunded 457(f)	\$1,760,304	~\$0	~\$1,760,000
Funded 457(f) match lump	\$1,269,255	~\$80,000	~\$1,350,000
Funded 457(f) match level	\$1,269,255	~\$50,000	~\$1,320,000
Funded 457(f) wash offset	\$1,269,255	~\$200,000	~\$1,470,000
LRSD	\$100Kto\$1.36M	~\$1.0Mto\$2.2M	~\$1.1Mto \$3.56M

The LRSD picture changes significantly. LRSD structures require substantial capital deployment, typically millions of dollars of premium over a 5–10 year funding period, with the bulk of that capital remaining committed for 30+ years until the executive's death. At realistic hurdle rates, the foregone earnings on that committed capital can exceed \$2 million on a present value basis, erasing and then exceeding any direct cash-flow PV advantage.

The question boards should ask first is: "If we did not fund this structure, what would we do with the capital?" When the honest answer is "deploy it in member lending at our marginal lending spread," LOC moves to the center of the analysis.

A note on methodology. LOC calculations require a hurdle rate assumption. At 5.78% (equal to the discount rate), LOC is zero, since the credit union is presumed indifferent between deployment alternatives. At 7%, the sensitivity becomes material. At 8% or above, typical for credit unions with strong loan demand, capital-intensive structures like LRSD show substantially larger LOC. Each institution should run this calculation at its own marginal hurdle rate.

Dimension Four: Net Economic Value Exposure

Net Economic Value (NEV) is a stress test. It asks how much economic value a credit union's net worth would lose if interest rates moved adversely. The methodology is straightforward: take the cash flows produced or required by each balance sheet position, discount them at current rates to get today's value, then re-discount at current rates plus 300 basis points to get the shocked value. The difference is the NEV impact for that position. Long-duration positions, where cash flows arrive many years in the future, are highly sensitive to this re-discounting and produce large NEV impacts under shock.

NCUA's NEV Supervisory Test evaluates the economic value of a credit union's net worth under a ± 300 basis point parallel interest rate shock. The test isolates how much economic value a credit union loses when rates move adversely. It is a core component of NCUA's interest rate risk supervisory framework and remains the primary quantitative IRR metric examiners reference.

NEV analysis is not a novel application to executive benefit structures. NCUA's Examiner's Guide specifies that credit unions with "material positions in long-term balance sheet accounts (such as fixed-rate mortgages and MBS)" should compute NEV. Long-duration LRSD receivables fall squarely within this category. Their duration profiles are typically longer than fixed-rate mortgages, which NCUA explicitly names as requiring NEV treatment. The NEV mechanic of discounting future cash flows under rate shock scenarios applies identically to LRSD receivables and conventional fixed-rate assets, with the magnitude of the NEV response scaling with the asset's duration.

Each structure produces a different balance sheet profile under rate shock:

Structure	Approximate NEV Impact (+300 BP)
Unfunded 457(f)	+\$75,000 (favorable, since liability PV falls)
Funded 457(f) (duration-matched)	~\$0 (asset and liability offset)
Funded 457(f) (wash offset)	~\$0 (asset and liability offset)
LRSD	-1,100,000 to -2,500,000

The LRSD exposure is structurally different from 457(f) exposure. A 30+ year fixed-rate receivable at AFR, with no prepayment optionality, limited secondary market, and no practical hedging instrument, loses 40–45% of its economic value under a +300 bp shock.

The NEV impact alone can exceed \$2 million, substantially larger than the direct cash-flow PV advantage LRSD typically shows over funded 457(f), which ranges from roughly zero to about \$1.2 million. This is not a forecast of realized loss. It is the modeled economic value impact under the stated +300 bp examination shock scenario. Whether that loss materializes depends on rate movement. Whether examiners flag the exposure depends on their focus. Boards should be prepared for either.

Dimension Five: Weighted Average Life

Weighted Average Life (WAL) measures the expected duration of capital commitment to a structure. Applying this standard metric to executive benefit structures reveals a concentration concern that does not show up in the other dimensions:

Structure	WAL
Unfunded 457(f)	(no capital deployed)
Funded 457(f) match-funded level	~6 years
Funded 457(f) match-funded lump	~12 years
Funded 457(f) with wash offset	~12 years
LRSD	~30–33 years

For reference, typical credit union balance sheet WAL metrics:

- ✓ First mortgage portfolio: 7 years
- ✓ Auto loan portfolio: 3 years
- ✓ Investment portfolio: 4 years
- ✓ Total balance sheet (weighted): 5–6 years

LRSD's 33-year WAL is an outlier among virtually every asset class on a credit union's balance sheet. It is longer than first mortgages, longer than nearly any investment, longer than any other instrument a credit union commonly holds. For a board reviewing ALCO reports, this should prompt a direct question: if our balance sheet WAL is 5.5 years, what justifies adding a 33-year asset class?

WAL is a clean, single-number summary of the structural duration commitment. It is also the metric CUs' ALM and examination frameworks are most familiar with. Introducing WAL as a dimension of executive benefit analysis connects the conversation to language boards already use.

WAL analysis of executive benefit investments is the approach NCUA has directed in its supervisory guidance to corporate credit unions, including specifically for insurance and split dollar arrangements without stated maturity dates. The methodology NCUA specifies, using actuarial life tables to estimate the period during which the investment will be held, is the same methodology applied here, with LRSD WAL computed to executive life expectancy. While that guidance directly addresses corporate credit unions rather than natural person credit unions, the underlying principle generalizes: executive benefit investments do not receive exemption from the asset-liability management discipline applied to the rest of the balance sheet. The duration commitment is real regardless of which type of credit union holds the position.

The Quantitative Dashboard

Structure	PV Cost	LOC (@7%)	NEV (+300 bp)	WAL
Unfunded 457(f)	\$1.76M	~\$0	+\$75K	—
Funded 457(f) with match-funded lump	\$1.27M	~\$80K	~\$0	12 yrs
Funded 457(f) with wash offset	\$1.27M	~\$200K	~\$0	12 yrs
LRSD	\$0.1M to \$1.36M	\$1.0M to \$2.2M	-1.1M to -2.5M	~33 yrs

Funded 457(f) with a match-funded duration-matched asset produces the strongest overall five-dimensional profile. LRSD, in certain structural variants, can show better direct cash-flow PV, but it does so while carrying meaningfully higher LOC, NEV, and WAL costs.

This does not mean LRSD is a bad structure. It means LRSD's value proposition is not reducible to direct cash-flow PV or zero net-cost. The structure delivers features 457(f) cannot:

- ✓ **Tax-free income delivery to the executive.** Distributions can be taken tax-advantaged (return of cost basis followed by policy loans) under current law, compared to ordinary income tax on 457(f) distributions.
- ✓ **Estate transfer to the executive's family.** Excess death benefit allocation to beneficiaries creates value not captured in the benefit comparison.
- ✓ **Favorable financial reporting.** The position appears as an asset rather than a liability on the balance sheet, with positive earnings recognition under recourse structures.
- ✓ **Potential avoidance or reduction of \$4960 excise tax exposure** on the executive benefit itself.

Each of these has legitimate value. The question for any specific institution is whether that value exceeds the quantitative cost premium across the other four dimensions, and the answer depends on institutional priorities and circumstances.

Why No Single Metric Works

A reasonable reader will ask: given the four quantitative dimensions, what's the bottom line? The honest answer is that they measure fundamentally different things:

- ✓ **PV cost** measures structure-specific institutional cost in present dollars.
- ✓ **LOC** measures foregone earnings, contingent on the institution's hurdle rate.
- ✓ **NEV** measures conditional exposure, contingent on rate scenarios and examiner focus.
- ✓ **WAL** measures duration commitment, contingent on mortality timing for LRSD.

Summing them produces a number, but one that obscures the underlying assumptions. A credit union with abundant capital, weak loan demand, and stable rate expectations will weight these dimensions differently from one with strong lending opportunities and balance sheet concentration concerns. The appropriate decision framework is institution-specific.

What is not institution-specific is the requirement that all four quantitative dimensions be visible, alongside the financial reporting view. A structure evaluated on financial reporting alone, or on PV alone, is evaluated on incomplete information. The gap between how a structure appears on the surface and how it actually behaves over its life is the gap this framework closes.

What the Analysis Tells Boards

Three observations should inform the board conversation.

- ✓ **First, fund the obligation.** The \$491,000 present-value gap in institutional cost between funded and unfunded 457(f) is the largest cost-pattern decision in the analysis. It dwarfs structural choices within funded options. Before debating 457(f) versus LRSD, the board should confirm that funding happens.
- ✓ **Second, within funded structures, match-funding with a duration-matched asset produces the strongest five-dimensional profile.** Lump sum or level contributions into an appropriate investment vehicle, matched to the vesting timeline, cleanly extinguishes the obligation with minimal LOC, near-zero NEV impact, moderate WAL, and financial reporting that accurately reflects the economics.
- ✓ **Third, LRSD's direct cash-flow PV can be made attractive through structural design choices, but each of those choices concentrates capital deployment, extends WAL, and/or increases NEV exposure.** The same features that make LRSD's direct cash-flow PV attractive are the features that generate outsized costs in the other three quantitative dimensions. A structure that wins direct cash-flow PV can lose fully-loaded cost by a material margin.

None of this argues against Loan Regime Split Dollar. It argues against evaluating LRSD, or any structure, on financial reporting and direct cash-flow PV alone.

A Note on §4960

The 457(f) PV cost figures include the 21% excise tax under §4960 for compensation above \$1 million paid to a covered employee. This treatment applies cleanly to state-chartered credit unions. Federally chartered credit unions may have grounds to take a §4960 exemption position under the federal instrumentality doctrine articulated in the 2021 final regulations, though the IRS has not specifically ruled on FCUs and reserved sections of the regulations for future guidance.

For an FCU taking the exemption position, remove the PV of the \$432,340 excise tax (\$220,284 at 5.78% over 12 years) from the 457(f) PV cost figures. This narrows the 457(f) cost burden by approximately \$220,000, but does not change the four-dimensional quantitative conclusion. LRSD's LOC, NEV, and WAL disadvantages are independent of §4960 treatment.

Effective for tax years beginning after December 31, 2025, §4960's scope expanded under the One Big Beautiful Bill Act. The tax now applies to any employee with over \$1 million of covered compensation, not only the top five highest-paid employees. This expands the population of potentially affected credit union executives and makes the §4960 analysis more salient for the first time since the provision was introduced in 2017.

The Decision This Framework Supports

Every executive benefit structure optimizes something. Unfunded 457(f) optimizes capital flexibility at the cost of higher expense burden and balance sheet exposure. Funded 457(f) optimizes balanced performance across all five dimensions. Wash-offset 457(f) optimizes earnings smoothing at the expense of capital efficiency. LRSD optimizes tax-efficient delivery to the executive and estate transfer to the executive's family, at the expense of capital commitment and balance sheet risk.

There is no universally best structure. There is only the structure whose trade-off profile best matches the institution's strategic priorities, capital position, rate outlook, and risk appetite.

Most executive benefit decisions in credit unions today are made on one or two dimensions: how the structure looks on the income statement and balance sheet, and how it shows up on the Call Report. Both are legitimate inputs. The Call Report accurately identifies what a credit union holds. The income statement accurately measures period activity. Neither, alone or together, characterizes how a structure will behave over its life.

The five-dimensional framework exists not to replace financial reporting analysis but to supplement it with the dimensions that characterize economic substance: present value of institutional cost, opportunity cost, interest rate risk exposure, and capital duration. Every structure presented here can be the right choice for the right institution. The question this framework helps answer is whether the choice is being made with full understanding of what each structure is actually doing.

This analysis is outcome-neutral. Every structure described here is appropriate for some credit unions under some circumstances. The purpose of the five-dimensional framework is not to recommend a structure. It is to ensure that whichever structure a credit union chooses, the choice is made on the full information set rather than on any single dimension of financial reporting or cost. Arctis Advisory provides independent evaluation across structural alternatives. Our analysis is not influenced by which structure a credit union ultimately chooses to implement.

This analysis was conducted using standard defined-benefit assumptions (executive age 50, retirement age 62, \$100K/year x 20 years target post-retirement income modeled as an annuity due, 5.78% discount rate, 40% executive tax rate, 4.50% AFR assumption for LRSD, life expectancy age 87). Actual outcomes will vary based on specific plan design, carrier illustration performance, mortality timing, interest rate environment, and credit union-specific hurdle rates and balance sheet characteristics. Numeric figures are illustrative of the framework's application and should not be relied upon as projections for any specific transaction.

LOC and NEV figures are directional magnitudes using representative assumptions. Institutions should compute these dimensions using their specific ALM frameworks and hurdle rate assumptions.

This analysis evaluates institutional cost and risk dimensions only. It does not address the qualitative dimensions of executive benefit selection (retention value, competitive positioning, tax treatment for the executive, estate planning considerations) which are legitimate and material in any actual decision.

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