

Armstrong

— Financial Services —

Whole Life vs. Universal Life

Selecting the Right Structure for Estate Funding

David Kakon, Math Honours B.Sc., January 2026 / David@ArmstrongLife.com

For corporate owners, the primary role of permanent insurance is to fund a defined future tax liability with tax-free liquidity at the moment it is crystallized. Where the objective is a specific liability amount, the choice between Participating Whole Life and Universal Life is primarily a structural one.

Participating Whole Life is designed to increase the death benefit over time using non-guaranteed dividends. When the goal is a fixed liability, this creates a practical trade-off: either the base coverage is set below the liability (creating a prolonged shortfall risk if dividends underperform), or the full liability is purchased upfront (forcing the corporation to pay for excess coverage it doesn't need and diverting capital from higher-priority business uses).

Level Universal Life is designed to match the target liability from inception. The face amount is set to the required level and remains at that level for life, while tax-sheltered policy performance is used internally to reduce future insurance costs rather than increase coverage, driving greater predictability and cost-efficiency when planning around a defined corporate estate liability.

This memo will examine the mechanics of both, concluding with a quantitative case study using a matched-funding methodology on a Net-To-Estate basis.

A. Participating Whole Life

Participating Whole Life is built around a fixed premium and a base death benefit, where any value beyond the base relies on non-guaranteed dividends from the insurer's participating account—a managed pool over which the policyholder has no investment control. Determined by an internal formula blending investment returns, mortality, expenses, and smoothing, these dividends are typically used to purchase additional paid-up insurance, making the policy's long-term coverage trajectory structurally dependent on discretionary dividend experience.

Discretionary Dividend Mechanism

The commonly referenced Dividend Scale Interest Rate (DSIR) used to generate Whole Life illustrations is frequently misunderstood as the "yield" on the policy. It is not. The DSIR is merely a gross reference rate used in a complex, proprietary formula. Before any dividend is credited to the corporation, the insurer must deduct for mortality, expenses, taxes, and reserve adjustments—factors the policyholder cannot see or control. Because these internal hurdles are fixed, a small reduction in the DSIR often results in a disproportionately larger reduction in the actual dividend credited ⁽¹⁾.

For this reason, Whole Life projections must be stress-tested to be credible. Prudent analysis requires evaluating scenarios at -1% and -2% below current assumptions. In many designs (particularly those relying heavily on paid-up additions), a 1% reduction in DSIR can translate into a materially larger reduction in projected cash and estate values, potentially delaying—or preventing—the policy from reaching the target coverage required to fund the estate liability.

The Structural Trade-off: Shortfall or Excess

Because Participating Whole Life uses dividends to buy additional insurance and increase the death benefit over time, this forces one of two outcomes when the objective is a defined future estate liability:

1) Shortfall: The base coverage is set materially below the liability today, relying on projected growth to "catch up" to the required amount. This leaves the estate under-insured for decades, making the plan's success contingent on two non-guaranteed factors: sustained dividend performance and the insured surviving long enough for that growth to materialize.

2) Excess: The base coverage is set to the full liability from day one, yet the policy structurally continues to purchase additional insurance via dividends. In effect, the corporation is paying for insurance it does not need to solve the liability—capital that is no longer available for higher-priority corporate uses (growth, reinvestment, debt reduction, dividends, or opportunistic deployment).

B. Level Universal Life

Level Universal Life (UL) is structurally designed to match a fixed estate liability with a contractually fixed death benefit from inception. The insurance amount is set up front and remains level for life, ensuring the liability is covered precisely at all times without the risk of “excess” coverage.

Crucially, unlike Whole Life—which utilizes returns to grow coverage—Level UL applies tax-free growth internally to offset future Cost of Insurance (COI) charges. This structure utilizes investment performance to reduce the corporate capital required to maintain the policy, prioritizing cost-efficiency over coverage maximization.

Funding Approach

Universal Life offers a broad spectrum of eligible funds, ranging from Guaranteed Investment Certificates (GICs) and government bond accounts to institutional mandates (e.g., BlackRock, Fidelity) and equity index sleeves (e.g., S&P 500, TSX).

Historically, however, this flexibility presented a dilemma for corporate liability matching: policyholders were forced to choose between the “Safety Trap” of low-yielding GICs or the “Volatility Risk” of equity indices (which introduce unacceptable variance for a fixed liability).

To resolve this trade-off, Canada’s major insurers have introduced Institutional **Smoothed-Yield Accounts**. These funds allow corporations to access the insurer’s participating asset pool—the “engine” of Whole Life—while retaining the cost-efficient structure of a contractually fixed death benefit of Universal Life.

Sun Life’s Diversified Account (SLDA) serves as a prime example ⁽²⁾. Managed by the same team and following the same “total-rate-of-return” mandate as the carrier’s Whole Life participating account, it provides a strong chassis for UL funding:

- **Contractual Capital Protection:** The account features a 0% floor, guaranteeing that the credited rate will never be negative.
- **Stability:** The fund is typically illustrated between **3.5% and 4.1%**, reflecting the historical band in which the fund trades with near-zero volatility (Std Dev ~0.2%).
- **Institutional Access:** It mirrors the Whole Life fund with direct access to private fixed income (14.4%), commercial mortgages (13.0%), and real estate (13.0%)—asset classes typically out of reach for standard corporate investment accounts—as well as government & corporate bonds (48.6%) and equities (9.8%).

It is important to reiterate that we are not chasing returns to increase the payout; the coverage amount remains fixed. Instead, this yield is compounded internally—tax-free—to offset the Cost of Insurance and price the premium.

C. Corporate Considerations: Net-to-Estate Analysis

For corporate owners, policy efficiency is not determined only by face value. It is determined by Net-to-Estate—how much after-tax capital can actually reach shareholders after accounting for Adjusted Cost Basis (ACB), Capital Dividend Account (CDA) credits, and share valuation.

1. **CDA mechanics:** The CDA credit from a corporately owned policy is generally the death benefit proceeds minus the policy's ACB immediately before death (ITA 89(1)(d)). If ACB is above \$0 at death, the CDA credit is reduced, and the excess will need to be distributed as a taxable dividend.
2. **CSV share-valuation mechanics:** Cash surrender value (CSV) can increase the terminal share-value tax even when the death benefit is tax-free. On the death of a shareholder, where the corporation owns a policy on the shareholder's life, subsection 70(5.3) generally provides that the policy's value immediately before death, for share-valuation purposes, is its CSV ⁽³⁾.

Whole Life (Corporate Net-to-Estate)

When evaluated under this framework, Participating Whole Life is structurally exposed to two adverse tax outcomes. First, its design tends to generate a higher ACB, directly reducing the portion of the death benefit that can be distributed tax-free through the CDA. Second, Whole Life is intentionally structured to accumulate significant CSV over time—approaching the death benefit at endowment—which increases corporate share value at death and can create an additional capital gains liability. As a result, the gross death benefit and the net amount ultimately received by the estate can diverge materially.

Level Universal Life (Corporate Net-to-Estate)

Universal Life can be structured to align death benefit, ACB, and CDA outcomes. Using a **Level + ACB** design, the policy's death benefit automatically adjusts to equal the level insurance amount plus ACB as it changes over time ⁽⁴⁾. Because the CDA credit is calculated as death benefit minus ACB, this structure is intended to credit the full target amount to the CDA at death, regardless of the policy's cost basis at that time, supporting predictable liquidity. Additionally, a properly structured level UL can be designed to carry minimal or nil CSV at the target planning age (life expectancy), reducing or eliminating the share-valuation exposure that can arise under ITA 70(5.3).

D. Methodology: Comparing Whole Life & Universal Life

A meaningful comparison between Whole Life and Universal Life requires a tax-adjusted Net-to-Estate analysis using matched funding. The objective is to evaluate structure under identical funding conditions and through the lens of after-tax estate value—not headline death benefits or single-point illustrations.

The Analytical Framework

To ensure a rigorous, bias-free comparison, we adhere to the following five-step process:

- 1. Define the Planning Benchmark:** Determine the specific required death benefit based on the estate's projected tax obligation at life expectancy.
- 2. Establish the Cost Baseline (Universal Life):** Using a conservative return assumption, solve for the annual premium required to fund a level-death-benefit UL that fully covers the target liability from inception to endowment.
- 3. Remove Funding Bias (Whole Life):** Apply that **identical annual premium schedule** to the Whole Life policy. Instead of letting the Whole Life illustration dictate the cost, we solve for the "best-fit" coverage that this fixed budget can purchase under conservative dividend assumptions.
- 4. Corporate Reality Test (Net-to-Estate):** Adjust both outcomes for corporate tax realities. We account for CDA mechanics, taxable dividends on the portion exceeding the CDA, and the share-valuation tax exposure driven by CSV.
- 5. Full Horizon Assessment:** Compare results not just at life expectancy, but across the full timeline. This highlights coverage reliability in intermediate years and ensures the solution solves the liability at *every* point, not just the endpoint.

Special Consideration: Financed Whole Life Strategies (IFA)

Where Whole Life is presented in a financed premium strategy, the bank loan capitalizes the premiums, effectively creating a "new premium" in the form of variable annual interest payments.

In this scenario, the analysis must compare the IFA's interest payments against the fixed Level UL premium. To be credible, this comparison must be stress-tested using a 6% loan rate and a -1% reduction in the Dividend Scale Interest Rate (DSIR), evaluated both with and without interest tax deductibility to account for GAAR uncertainty ⁽⁵⁾.

The coverage comparison must focus on the Net Death Benefit (Gross Coverage minus Loan Balance) versus the fixed Level UL Face Amount. Tax treatment of the CDA and CSV remains consistent across both structures; the only variable is the efficiency of the cost of paying interest for life versus the planned cost of insurance.

E. Case Study: Outcomes Under Matched Funding

This case study isolates structural efficiency from funding bias. We begin by defining the target Net-to-Estate objective and a common funding period, solving for the precise Universal Life premium required to secure that liability. We then apply that identical premium schedule to an optimized Whole Life policy design to strictly evaluate the difference in outcome.

1. Client Assumptions

- Profile: 55-year-old male, non-smoker, in good health
- Ownership: Quebec resident CCPC (Holding Company)
- Objective: \$10,000,000 of after-tax Net-to-Estate liquidity
- Funding Period: 10-year premium schedule
- Planning horizon: Life expectancy set to Year 30 (Age 85)

2. Solve for Universal Life first

We first solve for a Sun Life Universal Life design that provides level coverage from inception and for life, intended to precisely deliver the target Net-to-Estate outcome. The required annual premium derived from this solve becomes the fixed input for the comparison.

- **Asset Allocation:** 100% Sun Life Diversified Account (SLDA).
- **Return Assumption:** 3.95% (Smoothed Yield; no equity sleeve).
- **Solved Premium:** \$341,768 (Payable for 10 Years).

3. Apply Identical Funding to Whole Life

We then apply the same annual premium (\$341,768 x 10) to a best-fit Participating Whole Life design under conservative dividend interest scale assumptions of 5.25% (-1% from the current rate), ensuring the comparison isolates structure, not funding.

4. Evaluate both policies on a Net-to-Estate basis

Using current Quebec top-bracket rates, Net-to-Estate is calculated using:

- **Tax-free dividend:** Proceeds up to the CDA credit are distributed tax-free.
- **Taxable dividend:** Funds in excess of CDA are distributed as a taxable dividend at 40.11%.
- **CSV share-valuation tax:** Net-to-Estate is reduced by tax attributable to policy CSV under ITA 70(5.3), modelled as 26.65% (53.31% marginal rate × 50% inclusion rate).

$$\Rightarrow \text{Net-to-Estate} = \text{CDA} + [(\text{FV} - \text{CDA}) \times (1 - 40.11\%)] - [\text{CSV} \times 26.65\%]$$

5. Summary of Results (At Age 85)

The results below reflect after-tax Net-to-Estate outcomes (accounting for CDA credits and taxes), rather than potentially misleading gross values.

Universal Life / Level Face + ACB, YRT85 Cost, SLDA @ 3.95%

Year	Age	CSV	Face Value	ACB	CDA	Net-to-Estate
1	56	-	10,329,268	329,268	10,000,000	10,197,199
10	65	3,226,052	12,982,404	2,982,404	10,000,000	10,926,338
20	75	2,809,599	11,205,639	1,205,639	10,000,000	9,973,229
30	85	-	10,000,000	-	10,000,000	10,000,000
40	95	-	10,000,000	-	10,000,000	10,000,000

Whole Life / Par Protector (Offset After Year 10), Max Over-Funding, DSIR @ 5.25%

Year	Age	CSV	Face Value	ACB	CDA	Net-to-Estate
1	56	196,302	5,014,208	335,892	4,678,316	4,827,162
10	65	3,191,877	9,268,803	3,182,511	6,086,292	7,141,583
20	75	5,348,895	9,033,809	2,278,983	6,754,826	6,694,095
30	85	7,511,610	9,824,916	480,039	9,344,877	7,630,341
40	95	10,054,368	11,337,650	-	11,337,650	8,657,910

Conclusion:

Using identical premiums, Universal Life outperforms Whole Life not only at life expectancy but throughout the entire policy duration. The outcome is driven by structure: UL locks in full liability coverage from inception and directs performance to lowering long-term carrying costs. Conversely, WL's dividend-driven approach left the estate underinsured for the entire period up to life expectancy, and beyond.

Whole Life started with a material coverage gap and, despite decades of dividend-driven growth, never caught up. It provided as little as \$4.8M (under 50% of the target) at its lowest point and resulted in a \$2.4M shortfall at Age 85. In contrast, UL delivered the full \$10M Net-to-Estate at Age 85 and maintained superior after-tax liquidity at every measured point in the projection.

Appendix

- A. Universal Life Case Study - Illustration Details
- B. Whole Life Case Study - Illustration Details
- C. Source References

(A) Sun Life Universal Life @ 3.95%

Yr	Age	Deposit	Cash Value	Face Value	ACB	CDA	Net to Estate¹
1	56	\$341,768	-	\$10,329,268	\$329,268	\$10,000,000	\$10,197,199
2	57	341,768	228,544	10,652,417	652,417	10,000,000	10,329,820
3	58	341,768	533,640	10,970,084	970,084	10,000,000	10,438,755
4	59	341,768	936,619	11,281,909	1,281,909	10,000,000	10,518,103
5	60	341,768	1,257,412	11,587,266	1,587,266	10,000,000	10,615,482
6	61	341,768	1,674,302	11,885,270	1,885,270	10,000,000	10,682,845
7	62	341,768	2,008,346	12,174,967	2,174,967	10,000,000	10,767,313
8	63	341,768	2,529,992	12,455,276	2,455,276	10,000,000	10,796,159
9	64	341,768	2,876,072	12,724,815	2,724,815	10,000,000	10,865,347
10	65	341,768	3,226,052	12,982,404	2,982,404	10,000,000	10,926,338
11	66	-	3,231,633	12,883,863	2,883,863	10,000,000	10,865,835
12	67	-	3,227,809	12,770,058	2,770,058	10,000,000	10,798,696
13	68	-	3,214,451	12,639,480	2,639,480	10,000,000	10,724,053
14	69	-	3,192,139	12,490,617	2,490,617	10,000,000	10,640,846
15	70	-	3,160,726	12,321,908	2,321,908	10,000,000	10,548,178
16	71	-	3,117,539	12,131,583	2,131,583	10,000,000	10,445,703
17	72	-	3,061,078	11,924,499	1,924,499	10,000,000	10,336,729
18	73	-	2,992,610	11,700,719	1,700,719	10,000,000	10,220,955
19	74	-	2,910,463	11,460,747	1,460,747	10,000,000	10,099,130
20	75	-	2,809,599	11,205,639	1,205,639	10,000,000	9,973,229
21	76	-	2,687,287	10,936,975	936,975	10,000,000	9,844,925
22	77	-	2,542,726	10,656,397	656,397	10,000,000	9,715,416
23	78	-	2,375,935	10,366,454	366,454	10,000,000	9,586,223
24	79	-	2,181,625	10,070,419	70,419	10,000,000	9,460,716
25	80	-	1,955,828	10,000,000	-	10,000,000	9,478,723
26	81	-	1,685,850	10,000,000	-	10,000,000	9,550,679
27	82	-	1,361,948	10,000,000	-	10,000,000	9,637,007
28	83	-	975,169	10,000,000	-	10,000,000	9,740,093
29	84	-	523,490	10,000,000	-	10,000,000	9,860,477
30	85	-	-	10,000,000	-	10,000,000	10,000,000
31	86	-	-	10,000,000	-	10,000,000	10,000,000
32	87	-	-	10,000,000	-	10,000,000	10,000,000
33	88	-	-	10,000,000	-	10,000,000	10,000,000
34	89	-	-	10,000,000	-	10,000,000	10,000,000
35	90	-	-	10,000,000	-	10,000,000	10,000,000
36	91	-	-	10,000,000	-	10,000,000	10,000,000
37	92	-	-	10,000,000	-	10,000,000	10,000,000
38	93	-	-	10,000,000	-	10,000,000	10,000,000
39	94	-	-	10,000,000	-	10,000,000	10,000,000
40	95	-	-	10,000,000	-	10,000,000	10,000,000

Insured: Male Age 55 Standard Non-Smoker (QC) Corporate owner

Sun Life Universal Life II (YRT85) Level Face + ACB @ 3.95%

(1) Net Estate = CDA + [(Face - CDA) x (1 - 40.11%)] - [CV x 26.65%]

Armstrong Financial Services Inc. / David Kakon, Math B.Sc.

info@ArmstrongLife.com / Tel. (833) 603-5500 / Feb-2026

For discussion only, please review carrier illustration / E&OE

(B) Sun Life Whole Life Par @ 5.25%

Yr	Age	Deposit	Cash Value	Face Value	ACB	CDA	Net to Estate¹
1	56	\$341,768	\$196,302	\$5,014,208	\$335,892	\$4,678,316	\$4,827,162
2	57	341,768	405,668	5,474,322	668,571	4,805,751	5,098,038
3	58	341,768	628,767	5,935,869	998,298	4,937,571	5,367,870
4	59	341,768	866,279	6,399,469	1,324,774	5,074,695	5,637,217
5	60	341,768	1,146,076	6,865,594	1,647,557	5,218,037	5,899,301
6	61	341,768	1,452,905	7,335,051	1,966,050	5,369,001	6,159,233
7	62	341,768	1,826,216	7,808,834	2,279,610	5,529,224	6,407,750
8	63	341,768	2,239,955	8,288,334	2,587,489	5,700,845	6,653,488
9	64	341,768	2,694,798	8,774,454	2,888,780	5,885,674	6,897,533
10	65	341,768	3,191,877	9,268,803	3,182,511	6,086,292	7,141,583
11	66	-	3,395,039	9,186,016	3,128,290	6,057,726	7,026,396
12	67	-	3,625,744	9,117,200	3,067,288	6,049,912	6,920,559
13	68	-	3,884,145	9,062,517	2,998,731	6,063,786	6,824,504
14	69	-	4,169,977	9,021,871	2,921,878	6,099,993	6,738,503
15	70	-	4,483,036	8,995,488	2,835,885	6,159,603	6,663,173
16	71	-	4,644,975	8,983,022	2,739,735	6,243,287	6,646,112
17	72	-	4,812,227	8,980,610	2,636,398	6,344,212	6,640,572
18	73	-	4,984,946	8,988,181	2,525,413	6,462,768	6,646,625
19	74	-	5,163,700	9,005,893	2,406,399	6,599,494	6,664,431
20	75	-	5,348,895	9,033,809	2,278,983	6,754,826	6,694,095
21	76	-	5,540,870	9,071,914	2,142,809	6,929,105	6,735,653
22	77	-	5,739,927	9,119,921	1,997,512	7,122,409	6,788,885
23	78	-	5,946,240	9,177,480	1,842,831	7,334,649	6,853,499
24	79	-	6,160,073	9,244,173	1,678,480	7,565,693	6,929,121
25	80	-	6,381,403	9,319,263	1,504,258	7,815,005	7,015,102
26	81	-	6,611,010	9,402,940	1,319,979	8,082,961	7,111,497
27	82	-	6,825,755	9,496,043	1,125,495	8,370,548	7,225,373
28	83	-	7,047,885	9,598,387	920,688	8,677,699	7,350,661
29	84	-	7,276,910	9,708,241	705,529	9,002,712	7,485,775
30	85	-	7,511,610	9,824,916	480,039	9,344,877	7,630,341
31	86	-	7,752,515	9,949,775	244,219	9,705,556	7,785,580
32	87	-	7,998,671	10,082,520	-	10,082,520	7,950,674
33	88	-	8,248,831	10,222,644	-	10,222,644	8,024,124
34	89	-	8,502,187	10,370,154	-	10,370,154	8,104,109
35	90	-	8,756,801	10,523,086	-	10,523,086	8,189,180
36	91	-	9,011,802	10,680,695	-	10,680,695	8,278,824
37	92	-	9,267,674	10,841,837	-	10,841,837	8,371,770
38	93	-	9,525,999	11,006,056	-	11,006,056	8,467,139
39	94	-	9,787,128	11,171,553	-	11,171,553	8,563,039
40	95	-	10,054,368	11,337,650	-	11,337,650	8,657,910

Insured: Male Age 55 Standard Non-Smoker (QC) Corporate owner
 Sun Life Universal Life II (YRT85) Level Face + ACB @ 3.95%
 (1) Net to Estate = CDA + [(Face - CDA) x (1 - 40.11%)] - [CV x 26.65%]

Armstrong Financial Services Inc. / David Kakon, Math B.Sc.
 info@ArmstrongLife.com / Tel. (833) 603-5500 / Feb-2026
 For discussion only, please review carrier illustration / E&OE

C) Source References

- (1) “You don’t choose the investments that make up the participating account. We invest the account to meet the long-term objectives and guarantees of participating policies.” “The dividend scale interest rate is not guaranteed and is based on factors that are certain to change. The dividend scale interest rate is neither an estimate nor a guarantee of how the products will perform in future. Dividends take into account factors such as investment yield, mortality, expenses, taxes, and lapses.” “We also employ smoothing techniques to help keep the dividend scale interest rate more stable over time. Smoothing refers to the process of amortizing investment gains and losses over a number of years.” (Sun Life Participating Whole Life Facts Figures, 2025 / <https://cdn.armfs.com/memos/sources/810-3827.pdf>)
- (2) “The Sun Life Diversified Account is managed by the same group of professionals who are responsible for the Sun Life participating account.” “The diversified account is unique in that it offers Clients the investment philosophy and design of a participating account, but with the flexibility and transparency only offered by universal life insurance.” “To help minimize the volatility of returns, we use a smoothed portfolio asset yield to set the interest rate. The process of smoothing involves amortizing gains and losses on assets within the portfolio over time.” “Sun Life guarantees that the interest rate credited to your policy for the SLDA will never be negative.” (Sun Life Diversified Account, 2025/<https://cdn.armfs.com/memos/sources/810-4936.pdf>)
- (3) “The Income Tax Act (ITA) provides in subsection 70(5.3) that in the event of the death of a shareholder of a corporation, only the cash surrender value (CSV) of any insurance policy on the shareholder’s life needs to be considered for purposes of determining the fair market value (FMV) of the deceased’s shares in order to calculate the capital gain or loss on the shares. This means that even if the FMV of the life insurance policy was very high immediately before the insured’s death (because, for example, he or she had a terminal illness), only the CSV of the policy would be taken into account for the valuation of shares.” (Fair Market Value of Corporate Shares and Life Insurance, 2020/<https://cdn.armfs.com/memos/sources/810-7053.pdf>)
- (4) “Level insurance amount plus adjusted cost basis (ACB): The death benefit will always be equal to the basic insurance amount plus the policy’s adjusted cost basis. This option is designed for business owners who want to optimize credits to the corporation’s capital dividend account.” (Sun Life UniversalLife II Client Guide, 2025/<https://cdn.armfs.com/memos/sources/810-4554.pdf>)
- (5) “The tax treatment applicable to loans, interest deductibility and life insurance policies may change over time without any grandfathering provisions.” “In addition, the CRA could decide to invoke the GAAR in section 245 of the ITA.” “The concern is that, in circumstances where it determines that it is appropriate to do so, the CRA could use the GAAR to characterize a collateral loan as a policy loan. Any money received from a policy loan is tax-free to the extent the borrowed funds do not exceed the policy’s ACB, and taxable to the extent they do.” (Leveraging a Life Insurance Policy, 2024/<https://cdn.armfs.com/memos/sources/810-2876.pdf>)

Disclaimer: This article is for informational purposes only and does not constitute financial, legal, or tax advice. All performance figures and rates are illustrative and are not guarantees of future results. Please consult with your qualified professional advisors before making any financial decisions.