



Financing Nonqualified Deferred Compensation Plans: Why COLI Is Not a Silver Bullet

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Using corporate-owned life insurance (COLI) to finance a nonqualified deferred compensation plan exposes a plan sponsor to significant risks that do not exist in a comparable non-COLI investment. This article reviews these risks and the potential financial consequences sponsors are subjected to when these risks are realized.

INTRODUCTION

When investing, seeking higher returns generally means assuming higher risks. This is axiomatic and broadly accepted. Whether it is the purchase of a 3-month treasury bill or an investment in the equity of a start-up technology firm, the expected investment returns must always be evaluated relative to the risks incurred.

Selecting an investment strategy to finance a nonqualified deferred compensation (NQDC) plan is no different. However, whereas NQDC plan sponsors are frequently shown that corporate-owned life insurance (COLI) offers higher expected long-term net returns over a comparable “unwrapped” taxable mutual fund portfolio,¹ plan sponsors are rarely educated on the additional risks that must be assumed to get those higher expected returns. However, when the likelihood and potential costs of the risks of a COLI investment are considered, COLI is very often determined to be an inferior financing strategy. In addition, a properly



structured taxable strategy can provide greater flexibility without the constraints of COLI.

COLI is a riskier investment than the comparable taxable mutual fund portfolio, and plan sponsors comparing these strategies should fully understand and assess these risks. In addition, sponsors with current investments in COLI should periodically measure its performance against the opportunity cost of an alternative investment—any other investment requiring an expected commitment of capital for 30 to 40 years would be subjected to very rigorous assessments. To perform this analysis, whether evaluating a current or prospective investment in COLI, a sponsor should, at the very least, answer the following questions:

- Does the COLI investment add value relative to a tax-efficient non-COLI investment?
- If it does, what are the risks specific to the COLI investment?
- Does the value-added compensate for these additional risks incurred?

This article provides the framework for how these questions should be addressed and analyzed when deciding between COLI and a comparable taxable mutual fund portfolio. In the following three sections, I provide a review of common NQDC plan financing objectives, a review of COLI-specific risks, and an analysis of COLI value-added relative to the risks incurred as these relate to these two financing alternatives. Throughout this article, I have assumed the use of index funds to value the NQDC plan participant notional account and as the funding mechanism (whether or not wrapped in COLI). To compare COLI to mutual funds, I assume that the underlying investment management expenses for both strategies are the same. I assume the company will only select COLI if the value-added sufficiently compensates the sponsor for the additional risks incurred. To quote Ben Bernanke speaking on the subject of monetary policy management in a recent testimony before a Congressional Committee (July 19, 2006), "...we must consider not only what appears to be the most likely outcome but also the risks to that outlook and the costs that would be incurred should any of those risks be realized."

Before digging into the details, though, I want to note that any financing strategy will depend on the set of investment objectives and constraints unique to each individual plan sponsor. This article addresses two strategies from the perspective of a sponsor seeking to

understand and evaluate the comparative advantages and disadvantages of COLI with its closest alternative (mutual funds). There are other financing strategies (e.g., company stock) that may be chosen; however, the majority of corporate sponsors (approximately 76 percent according to a recent survey) financing a nonqualified deferred compensation plan ultimately select mutual funds or COLI.

WHY FINANCE A NONQUALIFIED DEFERRED COMPENSATION PLAN?

Before evaluating any investment strategy, it is important to establish the objective for financing a nonqualified deferred compensation plan.

Why set corporate assets aside² for these benefits? Investments made to finance NQDC plans will incur costs not present in a qualified plan trust: for COLI, the costs are insurance expenses; for taxable mutual funds, the costs are taxes on earnings. These costs, referred to as “sunk” or “frictional” costs, are the unavoidable price paid to set assets aside to pay future NQDC benefits. Regardless of these costs, there is a current trend toward funding NQDC plans. The fundamental objectives for setting assets aside generally fall into one or more of the following categories:

- Reserving assets as the benefits are accrued;
- Providing benefit security to participants in the event of a change-in-control; and
- Offsetting the accounting cost of providing the benefits.

Note that maximization of reported income account gains is not stated here. In reality, though, COLI is often promoted for its potential to enhance corporate net income (or otherwise improve accounting cosmetics). However, if we assume that the purpose of reserving assets is to finance the liability, then maximization of positive net income at the cost of uncompensated risk assumption is not part of this objective. If maximizing net income regardless of the risks assumed is the priority, why use COLI? Why not invest in an even riskier strategy that can offer the potential of even higher expected returns? COLI is appropriate in certain circumstances, but selecting it for its potential to generate gains in excess of those required to finance plan benefits may introduce risks the plan sponsor is not fully prepared to assume.

To reiterate the premise for this article, higher expected returns should only be sought when the sponsor is fairly compensated for the inevitable additional risks assumed. The rest of this article will address the incremental risks of investing in COLI versus mutual funds, and the quantification of value-added from COLI.

INVESTMENT RISKS SPECIFIC TO A COLI INVESTMENT

The following risks are incurred when financing NQDC benefits with COLI investments and not with mutual fund investments. These risks are unique to the COLI investment, are a necessary element of COLI investing, and should be carefully evaluated in the decision process.

Basis/Correlation Risk

Basis risk is the risk of an imperfect hedge. As an example of basis risk, assume that the liability to be financed exhibits zero growth over a period of five years (which has certainly happened). If mutual funds are used, then at the end of the five years the mutual fund balance will be unchanged and the liability will be perfectly hedged. Under this scenario, the mutual fund investment has incurred no frictional costs (*i.e.*, taxes).

If, on the other hand, insurance is selected as the financing vehicle, then the value of the COLI investment (cash value) after the five years will, with near certainty, be different from the liability (assuming not all insurance expenses are passed through to participant account crediting rates). In the case where no death benefits have been received, the insurance expenses have reduced the cash value below the plan's liability. If death benefits have been received, the balance may now exceed the liability. In either case, the company is still paying the frictional costs of investing in COLI, the COLI investment has provided an imperfect hedge, and the sponsor is subjected to the risk of a funding deficit.

Tax Risk

This is the risk that the corporate sponsor's effective tax rate declines below the rate that was anticipated when the expected value-added from COLI was quantified. The realization of a lower effective tax rate than the one anticipated will reduce the value-added.

Liquidation Risk

This is the risk that liquidation of COLI will be required. Premature COLI liquidation will very likely eliminate any expected

value-added, since surrender charges will often apply and taxes will be due on any gains on the cash surrender value in excess of the basis. In addition, the cost of the insurance coverage will be deducted from COLI cash values, but death benefits on the liquidated policies will never be received.

Low Market Returns Risk

If capital market returns are lower than expected, then the value-added from insurance will be reduced.

1. Under mutual funds, frictional costs (*i.e.*, tax costs) are indexed to the investment returns so that lower returns mean lower frictional costs. In fact, under negative returns, these frictional costs become frictional gains in the form of tax deductions on investment losses (assuming tax-loss carry-forwards or that the corporate sponsor has trading gains to offset).
2. Under COLI, frictional costs are indexed not only to the investment returns (as the cash values grow), but also to the net amount at risk (which may decrease as cash values increase), the size of the premium payments, etc. In aggregate, though, lower returns mean higher frictional costs of investing as a percent of returns. With negative returns, the frictional costs are still paid, the long-term value-added will likely be reduced, and the holding period to realize the value-added will be significantly extended.

Mortality Risk

This is the risk that death benefits will be received later than expected. Not even the insurance company can predict the mortality of a group with exact certainty. The smaller the insured population, the more unpredictable the distribution of death benefits becomes.

Legislative Risk

This is the risk that legislative and/or regulatory changes will negatively impact the current favorable financial treatment of COLI. While this risk is mitigated by an expectation that any change would be prospective only, there is no guarantee that such changes will provide for unlimited grandfather protection to existing arrangements.

Risk of Having to Change Insurance Carrier

This risk will likely be realized if the solvency of the selected insurance carrier becomes questionable. There are costs associated with

changing carriers, and those costs are borne by the investor and will reduce the value-added.

All these risks must be assumed to get the higher expected return from COLI. For example, any sponsor who has invested in life insurance but has not received death benefits as quickly as projected will tell you that mortality risk is real. These risks are not theoretical nor are they new—they have been realized by many sponsors and have been discussed by dependable authorities. For example, a bulletin published by the Office of the Comptroller of the Currency (OCC 2004-56) in 2004, outlining guidelines for the analysis of BOLI,³ recommends "...a thorough pre-purchase analysis of risks and rewards [of BOLI]..." and proceeds to present a list of risks for BOLI, most of which are directly applicable to COLI (*e.g.*, liquidity risk is addressed in the bulletin).

In addition to the above risks, there are potential negative optics of COLI investing. COLI vendors (with clear incentive-caused bias) have developed arguments that downplay the reality that COLI investment performance is significantly indexed to employee mortality (*i.e.*, that profits are made on the deaths of current or former employees). However, a material component of COLI investment returns is the cash proceeds received upon the death of the insured. Using those policy death proceeds to pay for the NQDC benefits promised to those employees insured (or to recover the cost of those benefits) does not change the reality that the sponsor will realize investment gains from the deaths of its employees.⁴

All of these incremental risks notwithstanding, there are circumstances when COLI is appropriate. It should, however, only be used when all characteristics are fully understood and accepted, and sponsors can gauge and properly assume the risks they will incur for the expected value-added. If the sponsor's utility of the value-added from COLI does not fairly compensate for these risks, then COLI should not be chosen for investment.

EXPECTED VALUE-ADDED OF COLI

How do we analyze the economic value-added and the risks from COLI relative to taxable investments? I have performed a sample analysis to quantify and illustrate both:

- (a) The expected value-added from COLI relative to taxables; and
- (b) An example of what can happen to that value-added when one of the COLI-specific risks—policy liquidation—is realized.

The modeling was performed according to the following assumptions/methodology:

- Two plans exist, each with one participant with the following profile:
 - Current age: 45
 - Retirement age: 60
 - Elected distribution term: 10 years
 - Expected death age: 85 (based on 40 percent of 1980 CSO Mortality)
- One plan offers the S&P 500 Index, and the other offers a Lehman Aggregate Bond Index.
- Each plan is mirror funded by the sponsor, such that assets are invested either in a no-load index fund or an institutionally priced COLI-wrapped index fund matching the liability.
- Cash from the company is used to pay the frictional costs of investing. The frictional costs of investing are the sunk costs paid by the sponsor. In other words, either the government or the insurance company is going to get paid for the sponsor's investment—either way there are sunk costs to investing.
 - For mutual funds, taxes are paid annually by the sponsor.
 - For COLI, expenses that are not recovered in any form (*e.g.*, mortality and expense, premium loads, spreads, etc.) are assumed to be paid directly by the sponsor (in reality these expenses are deducted from the policy cash value). Mortality charges are *not* considered a sunk cost, because they are theoretically recovered by the investor upon receipt of the death benefit.
- For taxables, assets are liquidated annually to pay benefits.
- For COLI, the company pays benefits from corporate cash and recovers the cost of the benefits from the policy death proceeds.

By having the company pay the frictional costs of investing, the funding assets will theoretically be allowed to grow at the gross investment return (net of investment management fees).

The following table presents the frictional costs for each strategy:

<i>Strategy</i>	<i>Cost Variable</i>	<i>Value</i>
COLI	M&E (Mortality & Expense)	50bp of Cash Value
	Premium Loads	5%
	Policy Fee	\$2.50 per month
Mutual Funds	Income Tax—Equities	12% (DRD) ⁵
	Income Tax—Bonds	40%
	Capital Gains Tax	40%
	Turnover—Equities	5%
	Turnover—Bonds	75%

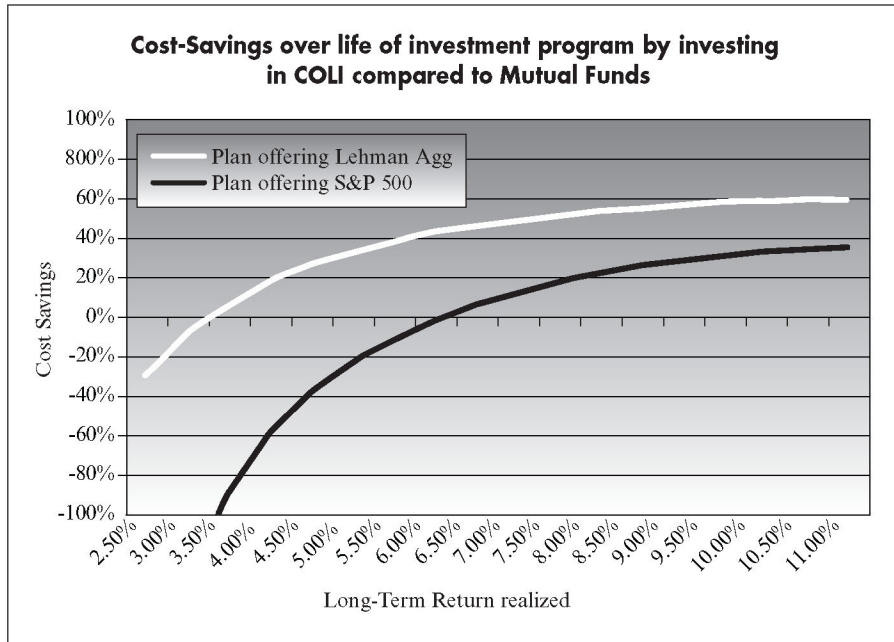
For both plans, I define the COLI value-added as the savings in sunk costs (on a present value basis at a discount rate of eight percent) when COLI is chosen over mutual funds. For example, if the present value of sunk costs generated from using COLI was \$2,000, and the present value of sunk costs generated from using mutual funds was \$2,500, then I would calculate a 20-percent cost savings (*i.e.*, value-added) from using COLI.

Please note that this is a fairly uncommon metric to use to analyze the COLI value-added. The reason I have chosen this method is that by assuming the sponsor pays all frictional costs of investing, the returns provided from each strategy will be equivalent; therefore, since the gross investment return will be passed through to the sponsor, the only difference in the investment strategies will be the risks assumed (as described in the previous section) and the frictional costs paid for each investment.

COLI Expected Value-Added

The expected value-added from COLI (again, the frictional cost savings of COLI compared to mutual funds) is shown below for different expected return levels.

What observations can be drawn from these results?



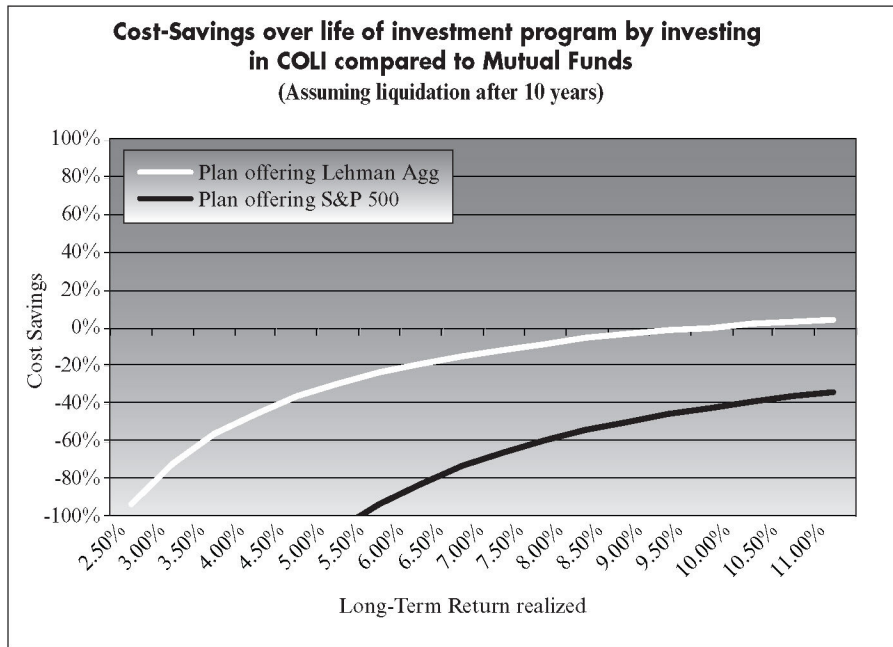
1. COLI adds value when the lines are above zero (*i.e.*, frictional costs of investing are reduced by moving to COLI from mutual funds). However, this is only a starting point for consideration of COLI. Once the sponsor has quantified the cost savings, it should determine if this cost savings is enough to justify the additional risks assumed with COLI. This depends on the utility of the cost savings to the sponsor, as well as risk tolerance levels and overall unique financing objectives and constraints.
2. COLI offers much greater value-added when bonds are the investment.
3. When returns are higher, the value-added from COLI is increased.
4. For stock funds, cost savings is limited to approximately 35 percent, and for bond funds, cost savings is limited to approximately 60 percent.

Please note that the particular COLI pricing available to a client will impact the results of this analysis. In addition, if the company's marginal tax rate is less than the 40 percent I have assumed, the value-added from COLI will be reduced.

Realization of a COLI-specific Risk

To illustrate one of the risks of COLI, I have assumed that plan funding is liquidated 10 years after the inception of the program and have calculated the associated costs for both the taxable investment and COLI upon liquidation.

The chart illustrates the cost savings generated by COLI when the plan assets are liquidated after 10 years.



What conclusions can be drawn from this?

1. Liquidating the policy after 10 years eliminates the COLI value-added.
 - Equities never provide value-added.
 - Bonds only provide a small value-added and only when expected returns are greater than 9 percent.
2. Under this scenario, mortality charges should be treated as sunk costs since the sponsor will not recover those in a death benefit. I have not treated mortality charges this way, and so the illustration is biased in favor of COLI.

What are the limitations to my analysis? I have assumed only one

participant in each plan and the purchase of one policy on that individual. I have assumed the individual dies at life expectancy. In reality, deaths will occur before and after life expectancy, so cash will likely be received prior to life expectancy.

CONCLUSION

Does the higher expected return (*i.e.*, value-added) from COLI compensate the plan sponsor for the additional risks incurred?

The answer to this is unique for each plan sponsor. A plan funding study should be performed to analyze the performance of each financing strategy relative to the plan's unique liability profile and the plan sponsor's own funding objectives and constraints. Each sponsor has unique risk tolerances, value utility curves, marginal tax rates, and cash flow requirements, etc. that will determine the strategy to pursue.

A few of the characteristics that indicate a sponsor should consider COLI include:

- A large population to reduce mortality risk;
- A plan sponsor without expected cash flow problems so that the liquidity risk can be reduced;
- A high corporate tax rate; and
- A very long investing horizon.

In many cases, advice on NQDC plan financing strategy is provided by individuals who receive compensation upon the consummation of a sale of insurance and who provide the plan sponsor illustrations and prevalence statistics that leave little doubt that COLI is the best choice. In this scenario, sponsors need an objective decision-making framework to assess the suitability of a COLI investment. With this framework, a plan sponsor can objectively determine *if* the expected higher returns provided by COLI provide adequate compensation for the additional risks incurred.

NOTES

1. Variable COLI products are often described as insurance "wrapped" mutual funds. This article describes the risks of an insurance-wrapped portfolio when compared to a comparable non-wrapped taxable portfolio.



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2. The majority of companies choosing to finance NQDC benefits set aside corporate assets in a grantor trust commonly called a rabbi trust.
3. BOLI is Bank Owned Life Insurance, a form of COLI sold to banking institutions.
4. OCC 2004-56 identifies an additional "Reputation Risk" factor.
5. Corporate Dividends-Received Deduction—70 percent of dividends for domestic equities excluded from income.

