

Financed Life Insurance:  
The Relationship Between Borrowing Cost, Policy Performance, and Internal COIs

Produced By: The GB Financial Group

At its simplest, the success of a premium-financed structure can be reduced to the formula:

$$[X(t)-(Y(t)+Z(a,h,p))>Savg(Z(a,h,p))]$$

X = Policy Performance

Y = Cost of Borrowing

Z = Cost of Insurance as dictated by a,h,p

Savg = Average Spread Needed (generally >150bps)

a = Insured's Age

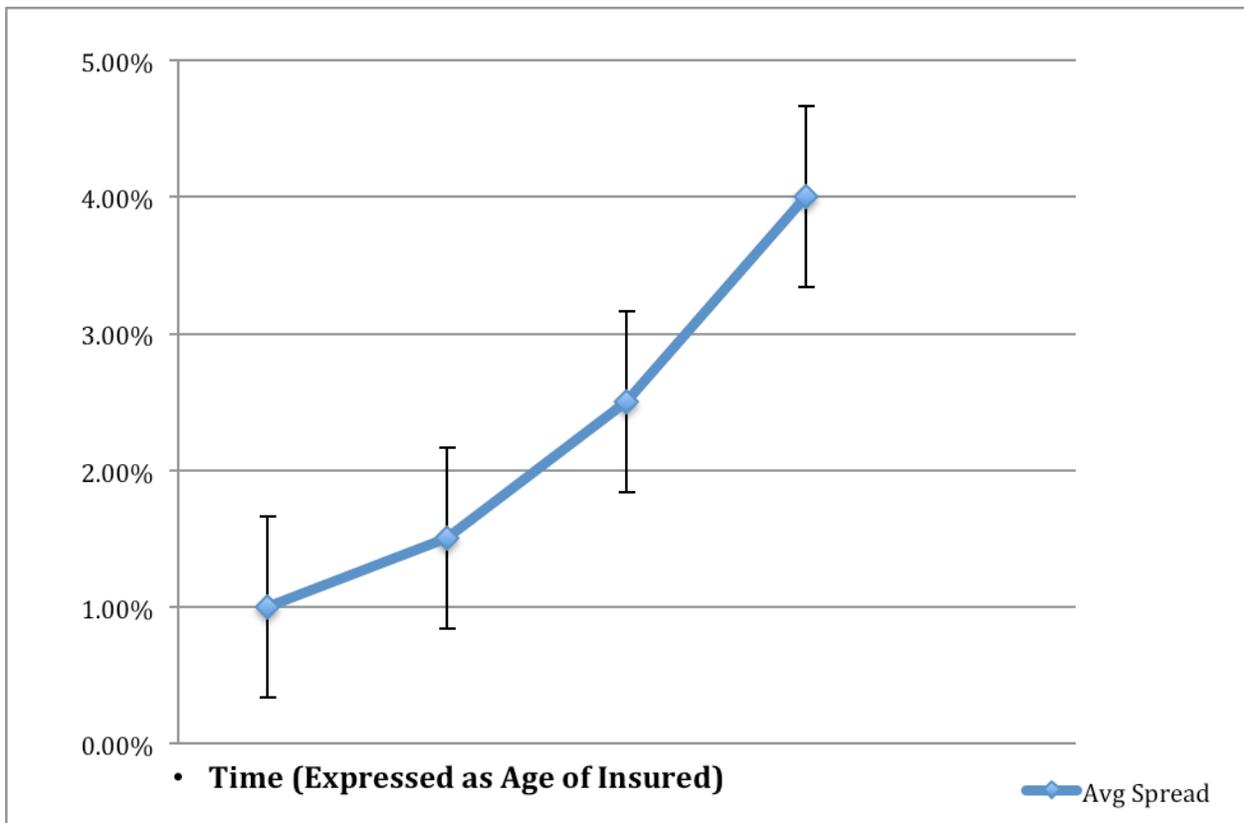
h = Insured's Health Rating

p = Product's Internal Costs

t = Time

Because the policy's death benefit is what will be used to payoff the loan amount, the structure's success depends on the arbitrage between the cost of acquisition and the value and growth of the policy itself. Because COIs increase as the insured ages, the average spread needed increases as well.

This equation is plotted graphically below where Y-Axis = Average Spread Needed, and X-Axis = Time (Expressed as age of Insured)



For this reason, the focus must be on what the average spread must be over the life of the policy to keep the transaction successful. Premium financing is a flexible transaction and the need for collateral will be impacted by the average spread, and while that is an important consideration, this paper will focus on solvency of the transaction, and therefore be focused on the death benefit's relationship to the loan balance.

While the internal costs of insurance vary according to both product type (Universal Life or Whole Life) and insurance carrier, we can conclude that the minimum average spread needed is approximately 150 basis points. An increase in this spread will be directly correlated with an increase in the insured's age, a decrease in the insured's medical underwriting rating, and increased product costs. A decrease of this spread can be directly correlated with a client contribution to the structure via partial premium payments or interest payments on the loan or by the utilization of a survivorship product, thereby spreading the mortality risk and decreasing COIs.

While the following section will deal specifically with the mechanics of a client contribution, the fact is clear: the simplest way to reduce the average spread needed is to reduce the leverage in the transaction, namely through a direct client contribution.

### **Offsetting Risk Through Client Contribution**

Risk can be mitigated through a client's financial contribution to the transaction. The client who chooses to deleverage the structure can do so by: (a) paying all or a part of the interest due on the loan (a decision that can be made annually); (b) paying all or part of the annual premium (a decision that can be made annually) or (c) by contributing the cash surrender of an existing life insurance policy. These options have several advantages. They reduce the embedded volatility in the structure, the net economic benefit will increase and the additional collateral that may need to be posted can be reduced.

An equity contribution by a client can be the most effective way to manage the inherent interest rate and policy performance risk. The equity provides a cushion for the inevitable fluctuations in rates going forward. In addition, the contribution will still be a fraction of what the same benefit would have cost the client had they not financed the solution.

The firm that structures these solutions should have the ability to illustrate for a client the impact different contributions make, how they will impact it in later years and most importantly should provide flexibility for contributions going forward in any given year.