

Executive Summary

Setting the Stage

This was a case brought to us by a CPA firm. Their client had a life insurance policy and wanted to know all his options. He was curious as to what they were because he was financially secure and was wondering, quite simply, what to do with the policy......like many of the cases I run into.

It was \$1,000,000 Hybrid Whole Life Policy that was structured as 26% whole life and 74% term insurance. My first reaction is that this is not a good structure for being able to reduce premiums because there was still some term insurance left which requires premiums to be paid to support it. There was still about \$375,000 of term insurance that had yet to be converted to whole life. There was a loan outstanding of \$165,000 and the interest was being rolled up into the loan each year. There was a gross cash value of \$305,000, a cost basis of \$192,000 and the dividend was \$14,000. The policy loan interest rate was 8%!

The difficulty in the case, albeit a small policy, was that the client was open to all his options. Should he continue to pay the premiums, pay off the loan, continue to borrow the interest, etc.....?

When I have a case such as this it requires a lot of creative thought as to all the options and then based on bringing more clarity to the client they can then start to understand and quantify the solutions.

Case Analysis

I came up with no less than 10 options:

- 1. Pay off the loan with internal policy values, dividends to reduce, and any balance due will be paid in
- 2. \$0 premiums paid, dividends to reduce premiums, loan and interest and any balance due is rolled back into the loan
- 3. The loan is paid off with internal values, policy is converted to a reduced paid-up policy with dividends reinvested in the policy
- 4. The loan is paid off with internal values, policy is converted to a reduced paid-up policy with dividends paid in cash
- 5. Pay off the loan and interest in cash, convert to a reduced paid-up policy and reinvest the dividends
- 6. Pay off the loan and interest in cash, keep the death benefit at \$1mm and use the dividends to reduce premiums
- 7. Eliminate the term insurance, use the dividends to reduce premiums, interest, loan balance and the balance due is paid in cash
- 8. Options #8, #9, #10 were a review of "new insurance" options



Conclusion:

The effect of bringing all these options was time well spent in the eyes of client as he became not only clear as to how all the options attempted to optimize returns but it also cleared a path for him to better understand his needs. He decided upon a much lower death benefit payable to each of his two children via the reduced paid-up life insurance option with the dividends paid in cash and split between his two children. This gave each of them roughly \$250,000 of death benefit each with about \$6,000 of cash flow per year.



Life Insurance Analysis

John

Overview

You have a hybrid whole life contract which means that you have a blend of whole life and term insurance. You started out with a 20/80 blend of whole life to term insurance. Blending term insurance is a strategy to provide the insurance desired and keep the premium down. What happens in these types of contracts is each year a premium and dividend is paid; the dividend would be used to convert a small portion of the term insurance to paid-up whole life insurance. Over time the term insurance would be fully converted. The reason you have to convert the term over time is that term insurance gets more expensive over time so you either have to convert it or surrender it in order to keep the premium level. Your NML term coverage in your contract operates a little different. They charge a flat rate guaranteed for 10 yrs. and then the term if not converted fast enough will absorb the dividend.

The risks are if the term insurance rates increase or the dividend rate decreases then in that case the term insurance would decrease over time because it cannot be supported. The policy is very reliant on dividends keeping pace in order to convert the term. The NML term insurance is very expensive in this design. The blend is a very aggressive blend. It should be more like 70/30, whole life to term but that drives the price up but delivers much less risk.

Let me help you understand whole life in its most basic form:

Whole life was the standard of all life insurance until the late 70's. The components of whole life are expenses, mortality and cash value. Based on your health class, the insurance company has priced in a guaranteed expense ratio with a profit margin, priced in guaranteed mortality costs with a good margin and invests the cash value in long term bonds, mortgages, some real estate and a very small % of large cap equity. If the expenses or mortality built into the contract change the dividend declared by the Board and paid by the company is affected. Your dividend rate will undulate with credit markets slowly.

Pre-technology age there were no illustrations and values were calculated using a rate book that issued each year which included rates, estimates of future dividend values. The "sales" pitch was always to show how the insurance company always paid more in dividends than they estimated giving the consumer the impression that is what they should expect and, in fact, that did happen. When the computer age came upon us and the "illustration wars" started it in about 1983-84 the insurance companies began to illustrate current dividends and project those estimates well into the future. As dividend crediting rates started to decline policies were impacted. The other action that was taken by



the insurance companies is that when the cash values were "raided" when short term interest rates went through the roof in the 70's the dividends paid to a policy that had a loan outstanding was the same dividend as one without a loan. The insurance companies reacted to this by implementing a dividend policy called "direct recognition". Your policy will be impacted by this dividend policy.

Basic Policy Information (Policy Data Review enclosed)

Age at issue: 43

Death benefit: \$1,090,383

Basic Whole Life Amount: \$286,052

Paid-up Additions (term that has been converted): \$431,656

Term insurance: \$372,656

Premium: \$12,160

Basic Amount: \$6,080 Term Insurance: \$6,080

Cash Value: \$304,460

Guaranteed on Basic coverage: \$86,013 Guaranteed of Paid-up additions: \$26,713

Dividend Additions: \$191,734

Policy Loan and accrued interest: \$166,380

Loan: \$100,000

Interest accumulated: \$15,555

Premium Loan: \$36,480 Interest accumulated: \$9,565

Total accrued interest to 2/3/2010: \$4,780

Policy Loan Interest Rate: 8%

2010 Dividend: \$14,491

Cost Basis: \$192,054 Net Cash Value: \$138,080

Taxable amount upon surrender as ordinary income tax: \$112,461

The total CV of \$305,515 (as of 10/13/2010) - \$192,054 (cost basis) = \$112,461

Tax to be paid at 40%: \$44,984

Net to Policyholder: \$93,096 (\$138,080 - \$44,984)



Options overview

We ran several options based on NML's capability of their illustration system. Some of our requests were unable to be run due to system limitations but what we do have will give us a good basis for helping you decide what is in your best interest. We ran all the illustrations with a dividend scale 100 basis points (1%) less than the current dividend scale. The current dividend rate is 6.15% and the options except for #7 were run at 5.15%. Based on when the illustrations were run the numbers may be a little different (interest amount, loan amount due to timing). NML just declared a lowering of their dividend scale by .15% to 6.00%.

Your non-personalized life expectancy assuming a standard risk class:

Normal LE	86.6
75%	93.1
85%	95.7

Options you provided from 2/11/10

Option #1

Assumptions: Pay off the loan with internal values, dividends used to reduce premium with excess to paid-up additions (PUA), any balance due paid in cash

The loan is paid off internally by surrendering or harvesting the cash value of the paid-up insurance which is how the dividends have been invested each year (we will discuss). By harvesting these values to pay off the loan and accrued interest the dividend will decrease but the policy will no longer be encumbered by an increasing loan and interest amount each year.

The illustration shows you that the paid-up insurance is surrendered to pay down the loan and interest and what is left is the basic amount of whole life, \$286,052 and \$483,268 of term insurance for a total of \$769,320. The term amount consists of a little PUA left over after the surrender. It does not indicate how much in the illustration.

Your outlay will increase then decrease in the 21st year as the dividend significantly increases based on the assumptions that the term insurance would be paid off. As time marches on the term costs increase and eventually the term insurance costs increase beyond the capability of the dividend and premium to support it. What happens is you must surrender some of the term insurance each year, enough so the total death benefit (basic whole life + term insurance) can be supported by the premium of \$12,160. Once the basic whole life insurance becomes paid up at age 90 you will see the dividend reappear and enough of the term insurance was converted to whole life so that when you are 90 the



death benefit consists of only whole life which is all paid-up. The dividend in reinvested back into the contract via PUA and the death benefit will slowly increase.

Not a viable option. Life insurance decreases over time and my costs increase.

Option #2

Assumptions: \$0 premium paid, dividends used to reduce premiums with excess to PUA, loan remains outstanding and the interest is rolled up into the loan balance each year

The life insurance amount needs to decrease proportionately over time because the loan and interest keep growing and the dividend is not large enough to absorb all 3 costs (premium + interest + term). Eventually you have harvested all of your cash value by age 85 (approximately) and cash payments are due. The premiums due will increase significantly due to the loan interest and the fact that the term insurance remains the same and becomes extremely expensive.

This is not a viable option as the death benefit will decrease and you will eventually have to pay significant premiums. If policy is surrendered there is significant imputed income that would be recognized with very little cash value to pay the ordinary income tax due.

Option #3

Assumptions: The loan is paid off with internal values, converted to a reduced paid-up policy (RPU), dividends used to purchase PUA

In this scenario you harvest most of your PUA cash value to eliminate the loan and any accrued interest. Reduced paid-up means that you exercise one of the non-forfeiture options allowed by the contract and when you do this the insurance company calculates how much paid-up life insurance can be supported by the net cash value. The policy becomes contractually paid-up. The dividends in this scenario are reinvested back into the policy via paid-up life insurance. The life insurance death benefit will grow from the reduced paid-up amount until death.

Death Benefit:		% growth	Cash Value	% growth
Initial: \$	\$298,359		\$158,852	
10 years: \$	\$354,790	1.75%	\$238,440	4.15%
20 years: \$	\$454,728	2.13%	\$362,058	4.21%
30 years: \$	\$582,338	2.25%	\$516,411	4.01%
40 years: \$	\$713,142	2.20%	\$713,142	3.83%



The following options were requested as of 10/4/2010 with an assumed dividend scale 100 basis points (1%) below the current scale or 5.15%

Option #4

Assumptions: The loan is paid off with internal values, converted to a RPU policy, dividends distributed as cash

The RPU life insurance amount after the loan and accrued interest are paid off is \$290,202. This amount will stay level and the cash value will grow so that at age 100 the death benefit and cash value will equal each other at \$290,202 each. Once the cost basis of the policy is recouped then the dividends become taxable as ordinary income and in the illustrations the taxes are paid by the dividend and a net amount of dividend is shown to be paid to you. This is the reason for the difference in gross and net dividend paid.

The cash value grows at a decreasing rate of return.

2.54% years 1-10 (age 70)

2.16% years 11-20 (age 80)

1.82% years 21-30 (age 90)

1.65% years 31-39 (age 99)

If you can invest the dividend at 5% after-tax then the following are estimates based on taking the average dividend over 20 yrs., 30 yrs. and 39 yrs.

Ave. dividend yrs. 1-20: \$3,410

Balance at 5%: \$118,392

Ave. dividend yrs. 21-30: \$4,254

Balance at 5%: \$249,031

Ave. dividend yrs. 31-39: \$3,589

Balance at 5%: \$453,044

If you add the death benefit of \$290,202 to each of the account balances:

Total benefit end of year 20 (age 80): \$408,594 Total benefit end of year 30 (age 90): \$539,233 Total benefit end of year 20 (age 99): \$743,246



Option #5

Assumptions: Pay the loan and interest off with cash (\$166,627), convert to a RPU policy, and reinvest the dividends using PUA

The death benefit will drop from \$1,090,383 to a RPU amount starting out at \$629,181. The death benefit and cash value will grow as the dividends are reinvested. This compares to the \$298,359 from the previous option #3 where we paid off the loan and interest with internal values, converted the policy to RPU, and reinvested the dividends using PUA. By paying off the loan with cash you have an immediate \$330,822 difference in death benefit. Now we have to look at the growth of the benefits and try to compare that to the opportunity cost of where the \$166,627 is invested.

After 10 yrs. the difference between option #3 death benefit and option #5 death benefit is \$396,102. The IRR on the \$166,627 in death benefit terms is 9.05%.

After 20 yrs. the difference is \$510,811 for an IRR of 5.76% After 30 yrs. the difference is \$657,313 for an IRR of 4.68% After 39 yrs. the difference is \$808,045 for an IRR of 4.13%

The IRR on your \$166,627 investment

10 years: 4.33% 20 years: 4.35% 30 years: 4.15% Age 100: 3.95%

Please review the illustration

Option #6

Assumptions: Pay off the loan and interest in cash (\$166,627), keep the death benefit at \$1,090,383, dividends used to reduce premiums

In this scenario the death benefit can be maintained until age 90. The term element causes the dividend to decrease at about age 80 and by 90 the dividend has decreased to \$0 and the death benefit decreases by shedding the balance of the term that cannot be supported any longer. Then at age 90 with the base policy requiring no further premiums, the term being eliminated, the dividend reappears and is reinvested back into the contract growing death benefit from a low point of \$861,483 to \$1,018,824 at age 99/100.



There are some small premium commitments that need to be paid. Per the illustration there are three years of small premium payments of about \$2,400/yr. Then the premiums can go to \$0 until about age 86. See Illustration for premium payments necessary to get to age 90 when the term goes to \$0 and the policy is all paid for contractually.

The IRR on your investment of cash:

Death Benefit: Cash Value:

10 years: 20.51%10 years: -1.86%20 years: 9.78%20 years: 3.00%31 years: 5.95%31 years: 2.77%35 years: 4.75%Age 99/100: 3.34%

Age 99/100: 4.40%

Option #7

Assumptions: Eliminate the term insurance and use the dividend to reduce premiums, interest, loan balance over time and the balance due paid in cash. The dividend rate was assumed to be 5.5% vs. all other options at 5.15%.

In this scenario we are going to eliminate the term insurance and be left with the basic policy death benefit of \$286,052 and PUA of \$431,656 for a total death benefit of \$717,708 and a NET death benefit of \$556,107, freezing the loan at \$161,600 and the interest at \$12,297. The premium due is \$6,080 for the base policy amount. The dividend goes down initially then after year 20 increase significantly. Over time you will pay a decreasing amount of premium which will eventually reach \$0. The dividend will eventually become larger than the premium due (\$6,080) and the interest due (\$12,927) and the excess will be applied to the loan balance increasing your death benefit.

The IRR on the Death Benefit: Cash Value:

10 years: 37.58%10 years: 15.22%15 years: 21.64%15 years: 11.08%20 years: 15.22%20 years: 9.71%



Option #8

Assumptions: Standard NS rate class, Rollover the net cash value and the loan to a new contract, pay off the loan and interest in the 2nd year to avoid step transaction and taxable income called "boot"

In this scenario you make a tax-free transfer to new insurance (1035 exchange). The type of policy we looked at first was a guaranteed death benefit variable life policy. This policy will guarantee a minimum death benefit, in your case \$807,460. The cash value is invested in a diversified portfolio of funds. You have some upside potential on your cash value growth which if meaningful and you live longer than expected may actually provide you with a significantly higher death benefit. In the worst case, the cash value goes to \$0 and you have a minimum death benefit guaranteed as noted above.

The transaction assumes a transfer of the entire gross cash value of approximately \$304,461 and a loan carryover for a net cash value rollover of \$138,080, then in the 2nd year you contribute cash to pay off the loan and interest, in this case \$174,700.

The following is your IRR in terms of return on death benefit based on your investment of \$174,700

Death benefit:

10 years: 16.54% 20 years: 7.95% 30 years: 5.24% Age 100: 3.90%

The cash value can go to \$0 but refer to the illustration to review estimates.

Option #9

Assumptions: Same as option #8 above but we use a different kind of contract called a No-Lapse Guaranteed Death Benefit Universal Life (basically term insurance for life)

This scenario will provide a level death benefit of \$1,098,692. The cash value will disappear over time and you will end up with a guaranteed death benefit only of the stated amount above.

The IRR on your \$174,700 investment/guar. death benefit

10 years: 20.19% 20 years: 9.63% 30 years: 6.32% Age 100: 4.70%



Option 10:

Assumptions: Current assumption Universal Life, 1035 tax free exchange, \$50,000 partial loan repayment, three levels of interest rates assumed at current charges which are not guarantee, 5%, 4%, minimum guaranteed rate 2.5%

The only guarantee in this type of contract is the minimum interest crediting rate of 2.5%. We assume in the first year you decrease the loan with a cash payment of \$50,000. This decreases the loan and interest that continues to accumulate in the policy and reduces you death benefit and net cash value over time.

It works at each interest rate level. The premium does reappear after age 100 at the 2.5% guaranteed minimum interest rate. The other risk is if the current charges increase premiums may reappear.

Please review the illustrations

Additional Comments

- Pay off a portion of the loan
- Pay off the NML loan with internal values in the current policy, wait a year and examine new insurance options, this will avoid the step transaction doctrine