

“Smith” Family

Executive Summary

The Smith Family law firm called and asked that I review and assess the family’s life insurance program. They were in the real estate business and they needed the liquidity provided by the life insurance program. They had 5 policies; 4 were Hybrid Whole Life policies from Northwestern Mutual (NML) which are a mixture of term and whole life and 1 Universal Life policy which is a policy with a crediting rate declared each month to be paid on the cash value.

The 5 policies totaled \$2,500,000 of death benefit with an annual premium of \$62,021. In summary, the Universal Life policy is in good shape. Only 1 of the NML policies is in good shape. The other 3 NML policies that insure Charles Smith were in trouble. Depending on the date of death of Charles Smith the family may actually spend more in premiums on some of the policies than death benefits received!!!! Why keep the life insurance? Looking at it from this point forward, what is done is done and they need the liquidity. Surrendering the life insurance would have meant losing most of the capital invested in the life insurance program.

POLICY #1: John Hancock: Universal Life

Insured: Charles Smith
Current Age: 84
Death benefit: \$250,000
Premium: \$7,725

This policy was in the best shape of any of the 5 policies in terms of cash value as it supports the policy cost structure. The policy had a cash value of \$220,000 with a death benefit of \$250,000. What this tells me is that you have to analyze the policy from 3 different perspectives:

1. Should I continue premium payments?
2. Should I stop premium payments?
3. What if I increased premium payments?

To help you understand the rationale, we need to see if the rate of return of the “benefits” generated from continuing the premium payments or even increasing premium payments are sufficient enough for the family to compel them to continue the payments. What are the “benefits”?

In life insurance, by law there is a defined minimum “corridor” or difference that needs to be maintained between the death benefit and cash value. Since the cash value is high relative to the death benefit, I know that the death benefit at some point will have to start to increase. If the family has the cash flow to continue premium payments then the question is when and by how much. To answer the question, I reviewed 2 different illustrations assuming the minimum (and current) crediting rate of 4%; 1). Continuing premium payments; 2). Stopping premium payments. Does the incremental death benefit increase generated by the continuing premium payments offer a

high enough rate of return on the continued premium payments vs. stopping the premium payments and keeping the death benefit level?

The rationale of actually increasing the premium; can we accelerate the increase in death benefit by maximizing the premium that can be deposited?

What we want to find out is; what is the rate of return on the premium deposited relative to the death benefit increase and will maximizing the premium deposited drive an even better rate of return on the incremental increase in the death benefit?

What we found was that the death benefit did increase as you continued to pay premiums and did accelerate the increase if you paid more in premiums but the returns on the premiums vs. additional death benefit were not significant enough to compel the family to continue premium payments.

Recommendation was to stop paying premiums of \$7,725 per year and the family agreed.

POLICY #2: Northwestern Mutual Hybrid Whole Life Policy

Insured: Mary Smith

Current Age: 78

Death Benefit: \$1,000,000

- Whole Life: \$487,000 (49%)
- Term Insurance: \$513,000 (51%)

Current Death Benefit:

- Whole Life: \$775,000 (77.5%)
- Term Insurance: \$225,000 (22.5%)

Policy Premium: \$23,363

This Hybrid Whole Life which started out with a 49%/51% mix of whole life to term. At first glance this mixture is right on the border of having too much term insurance. But having been bought so long ago when the dividend scale was much higher has helped bring down the amount of term insurance enough so that the current mix of whole life to term is 77%/23%, which is a very healthy mix this late in the game.

The main question to answer is do I continue premium payments and maintain ALL \$1,000,000 of death benefit or do I delete the term insurance, reduce the death benefit now, and consider different premium payment options, all of which would be centered on saving premium dollars?

I reviewed 6 different options. The options, other than to continue the policy as is with a \$1mm death benefit, were all based on initially reducing the death benefit by deleting the term rider and then seeing if over time the premium savings + the death benefit would surpass the current policy death benefit of \$1mm. In reviewing all the options, in general, the cross-over point was 10-12 years based on different dividend assumptions and growth assumptions. Based on all the variables and the fact that she would need to live well into her 90's for the strategy to really pay off the family decided to keep the policy as is and pay the annual premium to maintain the full \$1mm death benefit.

The next 3 NML policies were on the life of Charles Smith and were not in very good shape. Some real decisions had to be made and the analysis had to be very thorough.

The reason all three of these policies were in dire need of analysis is that the policies were structured as Hybrid Whole Life policies with 80% - 90% term insurance and 20% - 10% whole life. This is the ultimate RED FLAG. My first thought was that they may actually lose money on some of their life insurance program!! I was right as you will see!! How do you lose money? By having to make adjustments now at age 84 where the total premiums spent will be greater than the death benefit adjustments that need to be made in order to maintain the policies!

POLICY #3: Northwestern Mutual: Hybrid Whole Life (the most endangered policy)

Original Death Benefit: \$500,000

- Original Whole Life Death Benefit: \$50,000
- Original Term Insurance: \$450,000

Current Death Benefit: \$500,000

- Current Whole Life Death Benefit: \$50,000
- Current Term Insurance: \$450,000

Current status shows that the term insurance is back to its original amount of \$450,000. What happened over the previous 20 yrs. of annual premium payments (\$14,164/yr.) is that the term insurance decreased for some years but as the dividend decreased the policy was unable to decrease the term portion fast enough and the policy harvested all of the past dividends to help pay for the term insurance. Now that you have exhausted the past dividends the current premium + the current dividend is not enough to pay the premium of the whole life and the term insurance. The premium the last 2 years have been \$18,200 and \$21,685 because the term costs out strip the premium and dividend ability to pay for the policy. The premium will continue to escalate at a more accelerated pace as the client gets older.

Why is this happening? What do we do? How do we stop the premium escalation and maintain the death benefit? The news is not good. The only way to stop the premium escalation and maintain a level premium of the original \$14,164 is to:

1. Delete enough of the term insurance in order to maintain the premium of \$14,164
2. Allow the insurance company to decrease the term insurance by an amount annually that will allow the client to pay the same premium of \$14,164 going forward

I discovered that the total premiums that client has spent is \$310,000. Under option #1 above they needed to reduce the death benefit to below \$300,000 in order to maintain the premium of \$14,164. THEREFORE, the family would be losing money immediately!!!!

Option #2 allowed them to buy some time. They decided to allow the insurance company to decrease the term insurance by an amount annually that would keep the premium at \$14,164. The cross-over point of spending more in premiums than the death benefit was pushed out to age 92.

POLICY #4: Northwestern Mutual: Hybrid Whole Life

Original Death Benefit: \$500,000

- \$100,000 Base Whole Life
- \$400,000 Term Insurance

Current Death Benefit: \$500,000

- \$128,567 Whole Life
- \$371,433 Term Insurance

Premium: \$9,669

You can see that the term insurance has been decreased slightly and my analysis showed that the family could continue the premium payment of \$9,669 through age 98 and maintain the total death benefit of \$500,000 even if we assume a decrease in the dividend scale of 25 basis points. This is what the family decided to do. At age 99 the term insurance would decrease significantly and at age 100 you would only have the whole life insurance in the amount of \$125,000. If Charles lives this long the death benefit simply reimburses them a portion of the total premiums spent of \$358,000!

POLICY #5: Northwestern Mutual: Hybrid Whole Life

Original Death Benefit: \$250,000

- \$50,000 Base Whole Life
- \$200,000 Term Insurance

Current Death Benefit: \$250,000

- \$59,730
- \$190,269

Premium: \$7,100

If the client maintained paying the annual premium of \$7,100 then by the 6th year the term insurance would have to be reduced incrementally in order to continue to pay the \$7,100. By age 93 the family would have spent more in premiums, \$213,000, than the death benefit which would have been decreased to \$204,000.

We analyzed reducing the term insurance now but by how much? I first reduced the total death benefit to \$200,000 from \$250,000 then the premium is reduced to \$5,860 annually and the policy can maintain the \$200,000 death benefit until the 10th year. At that point the term insurance would need to be reduced incrementally.

We then considered reducing the death benefit to \$150,000. The premium would be reduced to \$4,619 and the death benefit of \$150,000 can be maintained at that premium for life.

The family has spent a total of \$149,100 in premiums so far. The family decided to reduce the death benefit to \$150,000 in order to recoup most of their premium payments.

Conclusion: Some good, Some bad!!!

The following recommendations were implemented:

1. Maintain the \$1,000,000 policy with a \$23,363 annual premium. Policy will remain level at \$1mm for life.
2. Maintain the \$250,000 Universal Life Policy but stop paying premiums of \$7,725
3. Continue to pay \$14,164 for \$500,000 of death benefit, let the term reduce over time incrementally so the family can continue to pay a level premium of \$14,164 and live with the fact that if the insured lives past 92 they will only be recouping some of the premiums spent on the program
4. Maintain the other \$500,000 policy for \$9,669 in annual premium with the bet the insured dies by 98
5. Reduce the other \$250,000 policy to \$150,000 and pay the annual premium pf \$4,619 to basically guarantee themselves that they will receive the \$150,000. This will allow them to recoup most of their premium payments.
6. They decided that some life insurance liquidity is better than no life insurance. The cash surrender values were so low that to cash in the policies would have meant they would have lost most of their money invested in the program.

“Smith” Family

NML:

Policy Type: Hybrid Whole Life

Insured: Mary Smith

Policy issue date: 4/18/96

Issue Age: 60

Health Class: Standard

Death Benefit: \$1,000,000

- Whole Life: \$487,000 (49%)
- Term Insurance: \$513,000 (51%)

Current Death Benefit:

- Whole Life: \$775,000 (77.5%)
- Term Insurance: \$225,000 (22.5%)

Policy Premium: \$23,363

- Whole Life Base: \$20,203
- Term Insurance rider: \$3,160

Cash Values as of 10/15/14:

- Guaranteed Cash Value: \$235,400
- Dividend Cash Value: \$188,882
- Total Cash Value: \$424,282

Cost Basis: \$452,303

- If you were to surrender the policy there would be no gain to recognize because your cost basis > total cash value

Hybrid Whole Life policy is a mixture of Whole Life and Term. This allows you to pay a lower premium over a longer period of time. Your original mixture was 49% Whole Life and 51% term insurance. By understanding how this structure works you will gain clarity so as the options are presented we will be able to make an informed decision which is the ultimate goal.

Understanding the basic mechanics:

The mixture of whole life and term is not a bad idea. It keeps the premium lower but you have to pay in for a longer time. The term insurance built into the product has an increasing premium as you get older. Therefore, the policy needs to reduce the term insurance over time to keep the premium level and maintain the total death benefit.

The term insurance is reduced by using an actuarially determined amount from the premium and dividend that is paid annually on the policy to “convert” a small portion of the term insurance to paid-up whole life over a period of time.

A potential problem arises when the dividend decreases; the term is not converted in an actuarially timely fashion. This results in the term costs utilizing more and more of the inputs into the policy; premium and dividends. The term insurance then stays relatively high and eventually the premium + dividend is not large enough to pay for the term insurance. The premium will then have to increase in order to support the original death benefit or you will have to delete all or a portion of the term insurance over time.

Based on the current death benefit mix of 77.5% whole life and 22.5% term you are in good shape, the term insurance amount has been converted to a low enough level and the problem described above will most likely not happen (see option #1).

NML is a very good and financially stable company. Their dividend has been decreasing as interest rates have declined over the last 20 yrs. This low interest rate environment has impacted the entire industry. A brief history of the declared NML dividend scales reflects the tough low interest rate environment:

- 2011: 6.15%
- 2012: 6%
- 2013: 5.85%
- 2014: 5.6%
- 2015: new dividend scale will be or has been declared by the Board of Directors

Recommendation

Based on the structure of the contract I reviewed 2 basic options. Options #1 is to continue to pay the premium compared to premium savings options (options #2 through #6). Based on my analysis of the options below my recommendation would be the following:

1. Maintain the current policy and continue to pay the premiums. The other options are telling me that the insured would need to live at least 10 – 12 yrs. for the other options to make sense. It takes 10-12 yrs. for the other options death benefits to surpass the current policy. Basically, the 10-12th year is when there is a crossover of death benefits. The longer the insured lives past that point the difference between death benefits (maintaining the current policy vs. the other options which require an initial reduction in the death benefit of at least \$200,000) becomes slowly greater but not enough to warrant the risk over the initial 10 yrs. of having to reduce the death benefit.
2. If your goal is to reduce cost then the other options should be considered. The best “bang for the buck” would be option #4. Option #5 would work out best if you felt comfortable enough with the risk of her living at least another 7-8 years.

Options

Option #1 – Maintain \$1,000,000 death benefit and pay premium of \$23,363

In order to maintain the full death benefit at \$1mm you have to keep the term rider on the policy and pay the entire annual premium each year of \$23,363. Based on the 2014 dividend scale the term will be fully converted to paid-up life insurance by age 90. At that point the death benefit will start to increase because the term insurance no longer exists and the full dividend is being reinvested back into the policy.

If the dividend decreases the term will remain on the policy longer and be converted over to paid-up life insurance over a longer time period. I reviewed different illustrations paying the full premium at the following dividend scales:

1. Current Dividend Scale: (5.6% - 2014)
2. -25 basis points below current dividend scale: (5.35%)
3. -50 basis points below current dividend scale: (5.15%)

Based on my review the term insurance will be 100% converted by the following ages, this is critical because you will not have to reduce the death in order to continue the same premium payment:

1. Current Dividend Scale: Age 90
2. -25 basis points below current dividend scale: Age 92
3. -50 basis points below current dividend scale: Age 94

Total Death Benefit under each dividend scale scenario at the 85% Life Expectancy (LE) probability (Age 98) is the following:

1. Current Dividend Scale: \$1,351,329
 - a. The term was fully converted by age 90
 - b. You picked up an additional \$351,329 of life insurance
 - c. This represents a 13.93% return on your premium of \$23,363
2. -25 basis points below current dividend scale: \$1,260,815
3. -50 basis points below current dividend scale: \$1,152,642

Internal Rate of Return on Death, Current Dividend Scale, at different ages, *since inception*. We have simply assumed you have paid the premium each since the policy inception date April, 1996:

1. Age 85: 3.92%
2. Age 90: 2.22%
3. Age 95: 2.04%
4. Age 98: 2.05%

Internal Rate of Return on Death, -25 basis points, at different ages, *since inception*:

1. Age 85: 3.92%
2. Age 90: 2.20%
3. Age 95: 1.72%
4. Age 98: 1.72%

Internal Rate of Return on Death, -50 basis points, at different ages, since inception:

1. Age 85: 3.92%
2. Age 90: 2.20%
3. Age 95: 1.29%
4. Age 98: 1.29%

Even though this is not the priority of your program at this time, but the rate of return on your cash value growth will increase over time because the term insurance will be less of a cost drag as more of the premiums and dividends are reinvested instead of being diverted to pay for the term insurance cost. Over the following incremental time periods your cash value will grow at the following rates of return based on the current dividend scale (these returns will be less if the dividend decreases):

- 10 yrs.: 2.74%
- 15 yrs.: 3.75%
- 20 yrs.: 4.54%

Refer to Illustration for NML Option #1

Option #2 – Surrender Policy

You could surrender the policy for the current cash value. Since the cost basis is higher than the cash value based on the information received there would be no gain and therefore no income tax to pay. You would receive \$424,282.

The insured would need to live 10 yrs., at which time the investment account would equal the death benefit. The assumptions are the following:

- Invest the entire cash value of \$424,282
- Continue to invest \$23,363
- Net after tax rate of return of 5%
- In 10 yrs. the account would be worth: \$999,660

Option #3 – Delete Term Rider and “offset” the Premium

The illustrations that I reviewed show that the premium is paid until the dividend is larger than the premium. We reviewed this scenario at the current dividend scale (5.6%) and -25 basis points below the current dividend scale (5.35%).

Current Dividend Scale:

You would need to pay premiums of \$20,203 4 more years (2015 – 2018); the premium is less because we deleted the term rider. At that time (2019) the policy would pay for itself via the dividend; the dividend in 2019 is estimated to be \$20,321 and the premium is \$20,203.

The policies death benefit is reduced to about \$780,000 and will slowly grow as premiums are paid and after you stop premiums as the excess dividend is reinvested back into the policy.

If the insured lives longer than 11 yrs. then the premium savings of \$141,421 + the death benefit in the 11th year of \$869,010 = \$1,009,431 vs. \$1,000,000 under option #1. After 15 yrs.; premium savings are \$242,436 + 15th year death benefit \$894,157 = \$1,136,593 vs. \$1,117,512 under option #1.

This option should be considered if you want to shorten premium payments, divert those payments for other purposes.

NML cannot illustrate exactly what I requested so we will discuss this matter at our meeting. What I mean by this is that based on my review of the illustrations you might be able to stop premiums altogether now but again the insured would need to live longer than 12 yrs.+ I will explain how this works when we meet.

Adjusted Dividend Scale: -25 basis points below current dividend scale

If the dividend scale were to be reduced by the amount indicated above then the premiums would need to be paid for 7 yrs. (instead of 4 yrs.) at which time the dividend is larger than the premium.

The insured would need to live 11 yrs. for this option to beat option #1

Option #4: Delete term and use dividends to reduce premiums

This option reduces the death benefit to \$758,383. The death benefit will remain at this level until the 10th year when the dividend is large enough to pay the entire premium going forward. The cash outlay in 2015, based on the illustration, would be \$2,556 and decrease to \$0 over the next 9 yrs. Basically this is somewhat of a miscellaneous premium expense, therefore, think of this as saving or being able to reinvest the entire premium of \$23,363.

Again, this option tells us that if the insured lives more than 10 yrs. you would be better off utilizing this option.

If the dividend decreases the premium will still only have a 9 yr. time frame just a little higher.

Option #5 – Convert Policy to Reduced Paid-up (RPU), Dividends Reinvested

If you convert the policy to a reduced paid-up (RPU) policy this would contractually halt premiums. RPU means that contractually the policy is fully paid-up with no future premiums due. The death benefit, dividends, and cash value are actuarially adjusted based on the total cash value and current age of the insured.

The illustration will show that the death benefit is reduced by approximately \$374,000 to \$636,216. The dividends would be reinvested back into the contract and the death benefit would grow.

Current Dividend Scale

Once again the insured would need to live 10 yrs. or longer. Based on the illustration after 10 yrs. the death benefit would reach \$762,064 + the premium savings of \$233,630 = \$995,694. By the 12th year you would have \$800,761 (death benefit) + \$280,356 (premium savings) = \$1,081,117.

Reduced dividend scale of -25 basis points

This would stretch out the “break-even” by about 11-12 yrs. We will discuss the illustrations.

Option #6: Keep the term rider and borrow the full premium

If you believe the insured has a short life expectancy, less than 10 yrs., then this option could make sense. BUT the death benefit decreases at an accelerated amount as the loan and interest grow on the policy. If interest rates increase then the death benefit will decrease at a faster rate.

I would not recommend this option.

John Hancock

Policy

Policy type: Universal Life

Insured: Charles Smith

Policy date: 1/28/90

Issue Age: 60

Death Benefit: \$250,000

Death Benefit Option: Level

Current Premium: \$7,725

Cash Value: \$220,000 (approx.)

Cost Basis: \$185,400 (24 premium payments of \$7,725)

Basic Mechanics of Universal Life (UL)

This is a flexible premium product structure. Basically, there are 3 components that drive the success of this policy. They are:

1. **Expenses:** UL policies are front loaded from an expense standpoint and at this time they are quite small and if the insurance company decides to increase this cost component it will have little impact. Expenses are deducted monthly from the cash value and can be changed by the insurance company.
2. **Mortality costs:** These represent the cost of the insurance (we will refer to these costs as COI charges). The COI cost factor increases over time. Mortality costs/COI is deducted monthly from the cash value
3. **Cash Value:** After the initial premium load on each payment the net amount is deposited into the cash value. The cash value is invested in short – intermediate term bonds. The crediting rate is applied and can change monthly. In UL policies there is a minimum crediting rate, which in your case is 4%.
4. The cost of the “life insurance” that is deducted monthly from your cash value is calculated by the following formula:
 - a. Calculate the Net Amount at Risk (NAR) which is the difference between the Death Benefit and the Cash Value
 - b. Apply the COI factor for the year to the NAR
 - c. Deduct the annual cost monthly from the cash value
5. The premium and earnings on the cash value are used to fund the COI
6. In an illustration the premium that is originally calculated to fund the life insurance policy is promulgated by making certain assumptions about expenses, mortality costs, and crediting rates. The higher the crediting rate that is assumed the lower the premium. The problem that can occur is if the crediting rate decreases and/or the insurance company increases either the expenses or mortality costs. If any of these happen the premium and earnings may not be large enough over time to pay for the cost of insurance (COI). If the COI for the year cannot be funded by the premium and earnings then the insurance company will make up the difference by deducting the balance directly from the cash value. If this occurs over a period of time then the policy will run out of cash value and the policy will lapse with no value.

This policy has a low NAR of only \$30,000 (\$250,000 - \$220,000 = \$30,000). This means that the COI factor is applied to only \$30,000. Even though you are now almost 85 with a high COI factor and the crediting rate is only 4% the policy's cash value and earnings are more than enough to fund the policy for your life.

So what are your options? Well, we reviewed the following scenarios:

1. Continue to pay the premiums
2. Increase the premium – this might seem odd but it will become clear as to why I reviewed this option
3. Stop the premiums

In your UL policy there is a VERY UNUSUAL component. John Hancock structured this policy with 2 crediting strategies and you will receive the higher of the 2:

Current Crediting Rate vs. Cumulative Crediting Rate: The policy operates under two different crediting strategies:

- *Current Crediting Rate:* This is the “normal” crediting rate strategy used by Universal Life. The crediting rate will fluctuate with interest rates and is declared each month for each policy series. There is a guaranteed minimum rate stated in the contract which is 4% in our case. There is no maximum.
- *Cumulative Crediting Rate:* This is an interesting and unique crediting strategy for this particular policy series. John Hancock assumes the crediting rate is and always will be 5.5%. In other words, they calculate death benefits and cash values as if you have received a level 5.5% crediting rate since inception. This rate will never change.
- You will receive the **higher** of the two values

Your policy is currently crediting the minimum crediting rate of 4%. We will discuss my opinion as to the methodology and likelihood that this rate will increase.

Recommendation

Based on reviewing all the options I would recommend to STOP paying premiums. If you continue to pay the premiums Clarence has to live 8 yrs. and then you basically break-even on the premium invested. The incremental return on the additional death benefit provided by paying the premium beyond 8 yrs. is only about 2.5% per the analysis.

Options

I will comment on these options in the following manner; which option optimizes my return on death? Since your contract is well funded the death benefit will state to actually increase soon because of IRS Guidelines which will discuss. This is the reason I reviewed actually increasing the premium. What kind of rate of return on the additional death benefit due to different premium deposits may I realize?

Option #1: Continue to pay \$7,725

Assuming the Minimum Crediting Rate of 4%

1. In 5 yrs. the death benefit is \$289,444. This represents a \$39,444 increase in death benefit proceeds. The rate of return on the premium payment is .70%.
2. In 8 yrs. the death benefit is \$374,623. This represents a \$159,550 increase in death benefit proceeds. The rate of return on the premium payment is 15.48%.
3. In 10 yrs. the death benefit is \$409,550. This represents a \$159,550 increase in death benefit proceeds. The rate of return on the premium payment is 12.86%.
4. In 12 yrs. the death benefit is \$447,941. This represents a \$197,941 increase in death benefit proceeds. The rate of return on the premium payment is 11.23%.

Option #2: Increase the Premium to \$12,363 which is the maximum allowed

The reason to look at increasing the premium is that the policy has a very low insurance drag and the cash value is in close proximity to the death benefit. As you increase the premium the death benefit will automatically increase as it reaches the insurance corridor which is a government rule that says there needs to be a certain amount of difference between the cash value and death benefit. My purpose was to see if increasing the premium would drive more of a death benefit difference between paying the planned premium of \$7,725 vs. \$12,363.

From a pure premium standpoint, increasing the premium to the government maximum will drive a higher death benefit as shown below.

1. In 5 yrs. the death benefit is \$327,836. This represents a \$77,836 increase in death benefit proceeds. The rate of return on the premium payment is 7.78%.
2. In 8 yrs. the death benefit is \$429,944. This represents a \$179,944 increase in death benefit proceeds. The rate of return on the premium payment is 13.21%.
3. In 10 yrs. the death benefit is \$478,078. This represents a \$228,078 increase in death benefit proceeds. The rate of return on the premium payment is 10.89%.
4. In 12 yrs. the death benefit is \$531,088. This represents a \$281,088 increase in death benefit proceeds. The rate of return on the premium payment is 9.51%.

Comparing Option #1 and Option #2; Does the extra premium of \$4,638 (difference between paying \$7,725 and \$12,363) make sense from a rate of return standpoint? Is the extra death benefit derived from the additional premium worth it?

- After 5 yrs. the difference in the death benefit driven by the extra premium of \$4,638 is \$21,476 for a **-2.55%** return
- After 8 yrs. the difference in the death benefit driven by the extra premium of \$4,638 is \$38,102 for a .59% return
- After 10 yrs. the difference in the death benefit driven by the extra premium of \$4,638 is \$52,947 for a 2.39% return
- After 12 yrs. the difference in the death benefit driven by the extra premium of \$4,638 is \$67,318 for a 2.89% return

In my opinion I would not spend the extra premium unless you are comfortable the insured will live past 8 yrs. and you are satisfied with a 2%+ return.

Option #3: Stop Premium Payments

Should I keep paying the \$7,725 of premium?

1. In 5 yrs. the death benefit difference between \$0 premium payments and paying \$7,725 is \$39,781. The rate of return on the premium payment is .98%. The premium savings are \$38,625. Can you invest the premium savings and earn more than .98%?
2. In 8 yrs. the death benefit difference between \$0 premium payments and paying \$7,725 is \$68,834. The rate of return on the premium payment is 2.39%. The premium savings are \$61,800. Can you invest the premium savings and earn more than 2.39%?
3. In 10 yrs. the death benefit difference between \$0 premium payments and paying \$7,725 is \$88,409. The rate of return on the premium payment is 2.44%. The premium savings are \$77,250. Can you invest the premium savings and earn more than 2.44%?
4. In 12 yrs. the death benefit difference between \$0 premium payments and paying \$7,725 is \$118,100. The rate of return on the premium payment is 3.67%. The return is decreased by the premium savings. Can you invest the premium savings and earn more than 3.67%?

NOTE: The next 3 policies are similar to NML policy; they are each Hybrid Whole Life policies

Policy

HYBRID Whole Life Paid-up at 98

Insured: Charles Smith

Policy Date: 4/28/93

Issue Age: 63

Standard Health Class

Original Death Benefit: \$250,000

- \$50,000 Base Whole Life
- \$200,000 Term Insurance

Current Death Benefit: \$250,000

- \$59,730
- \$190,269

Cash Value: \$35,845

- Guaranteed Cash Value (Base Policy): \$27,971
- Dividend Cash Value: \$7,873

Premium: \$7,100

Hybrid Whole Life policy is a mixture of Whole Life and Term. Your original mixture was 20% Whole Life and 80% term insurance. The reason to mix whole life and term is to drive the premium down.

Understanding the basic mechanics:

The mixture of whole life and term is not a bad idea. It keeps the premium lower but you have to pay in for a longer time. The term insurance built into the product has an increasing premium as you get older. Therefore, the policy needs to reduce the term insurance over time to keep the premium level and maintain the total death benefit.

The term insurance is reduced basically by using an actuarially determined amount from the premium and dividend that is paid to “convert” the term to paid-up whole life little by little each year over the life of the policy.

The problem arises when the term mix is above 50% which in your case it was 80% and/or the dividend decreases; the term is not converted in an actuarially timely fashion. This results in the term costs utilizing more and more of the premium and current dividend. The term insurance then stays relatively high and eventually the current premium + current dividend is not large enough to pay for the term. The premium will then have to increase to pay for the term and the base policy or you will have to delete all or a portion of the term insurance. The premium accelerates at a very rapid pace once you have reached this tipping point.

Analysis

The problem is that the insured is about 85 years old and the mixture of term to whole is working against you. Your term insurance mix was much too high and a poor design. You still have \$190,269 of term insurance death benefit which still represents 75% of the total death benefit. After all these years the term insurance has only been reduced by 5%. Eventually the policy death benefit of \$250,000 will not be able to be maintained by the \$7,100 premium.

We will discuss the illustration, but you will see that the cost of the term is now larger than what can be supported by the policy premium and dividend. There are some past dividends that are being harvested or cashed-in to make up the balance of the costs that are actually due. This means that your term insurance amount actually is increasing and in the 6th year from now the term insurance will stand at \$200,000 (back to the original amount) and will need to be reduced enough annually so the policy premium of \$7,100 can be maintained. Your other choice is if you wanted to maintain the death benefit of \$250,000 you would need to pay an ever escalating premium amount – *I did not consider this choice.*

Option #1: Retain Current Policy structure without any changes and pay the planned premium of \$7,100

What will happen is in the 6th either you have to reduce the term portion of the death benefit.

I reviewed an illustration as to how to maintain a level \$7,100 premium payment. Starting in the 6th year the death benefit is reduced by an amount so that the costs of the policy can be paid for with the premium payment of \$7,100.

Refer to the illustration

By the 30th year or age 93 you have actually spent more in premium (\$213,000 since inception) than the death benefit which will have been reduced to \$204,635!

Option #2: Do I reduce the death benefit to \$200,000?

This reduces the amount of term insurance. The premium is reduced to \$5,860 and this will support the \$200,000 death benefit for 10 yrs. At that time the death benefit starts to reduce. The risk is if there is a death prior to age 93 then you would have been better off maintaining the \$250,000 and pay \$7,100.

In this scenario the cross over point is again in the 30th year where the total premium spent since inception is \$201,840 and the death benefit is \$200,000. The death benefit is reduced more rapidly under this scenario than in Option #1.

Compare Option #1 and Option #2:

The difference in premium is \$1,240 per year (\$7,100 - \$5,860). What is the rate of return on the difference in premium compared to the death benefit?

- In the 9th year the death benefit in option #1 is \$214,211 and the death benefit in option #2 is \$200,000. The difference is \$14,211. So if there is a death in the 9th year you will have an extra \$14,211 of death benefit which has cost \$1,240 per year. The rate of return on the extra \$1,240 of premium is 4.8%.
- In the 10th year the death benefit in option #1 is \$204,635 and the death benefit in option #2 is \$200,000. The difference is \$4,635. So if there is a death in the 10th year you will have an extra \$4,635 of death benefit which has cost \$1,240 per year. The rate of return on the extra \$1,240 of premium is **-19%**.
- In the 11th year the difference in the death benefits is only \$2,332 and the rate of return on the extra \$1,240 of premium is **-34.5%**
- In the 12th year the tide has turned because option #2 death benefit is decreasing at a more rapid pace. The difference in the death benefit is \$19,166 and the rate of return on the extra \$1,240 of premium is 3.84%
- In the 13th year the difference in the death benefits is \$24,867 and the rate of return on the extra \$1,240 of premium is 5.86%.
- In the 14th year the difference in the death benefit is \$23,207 and the rate of return on the extra \$1,240 of premium is 3.79%.
- In the 15th year it is a wash. The difference in the death benefit is \$17,810 and the rate of return on the extra \$1,240 of premium is **-.54%**

As you can see, it will depend on the year of death as to what the right decision would have been!

Option #3: Do I reduce the death benefit to \$150,000?

The premium is reduced to \$4,619 for \$150,000. The \$150,000 of death benefit can be supported to age 100. The premium savings is \$2,481.

Since option #1 has a death benefit that will decrease slower than Option #2 let's compare option #3 to option #1:

- In the 11th year the death benefit in option #1 is \$195,520 vs. \$150,000. Therefore the difference in death benefit is \$45,520 and the rate of return on the extra premium of \$2,481 is 8.2%.
- In the 12th year the death benefit in option #1 is \$185,865 vs. \$150,000. Therefore the difference in death benefit is \$35,865 and the rate of return on the extra premium of \$2,481 is 2.72%.
- In the 13th year the death benefit in option #1 is \$175,152 vs. \$150,000. Therefore the difference in death benefit is \$25,152 and the rate of return on the extra premium of \$2,481 is **-3.73%**.

This is the minimum death benefit reduction that should be considered.

Recommendation

We will need to hammer this one out. There is a risk in the first 10 yrs. if the insured dies because of the initial reduction of death benefit. If he lives beyond 10 yrs. then it depends on the year of death.

Policy

HYBRID Whole Life Paid-up at 98

Insured: Charles Smith

Policy Date: 4/28/94

Issue Age: 64

Standard Health Class

Original Death Benefit: \$500,000

- \$50,000 Base Whole Life
- \$450,000 Term Insurance

Current Death Benefit: \$500,000

- \$50,000
- \$450,000

Cash Value: \$28,533

- Guaranteed Cash Value (Base Policy): \$28,533
- Dividend Cash Value: \$0

Premium: \$14,164

- Currently this premium is increasing dramatically and will continue do so
- The premiums the last 2 years have been:
 - 2013: \$18,200
 - 2014: \$21,685

Analysis

In order to stop the increase in premium we have to reduce the term insurance component. There are not any past dividends to harvest to help pay for the increase in premium and the term insurance component is back to the original amount of \$450,000!

The original premium was \$14,164. You have spent a total of approx. \$310,000 in premium up to this point. We may need to view keeping this policy as a way to recoup some of your premiums!

If we allow the term insurance to reduce as needed to keep the premium level at \$14,164 then you will actually have spent more in premium by age 92 than you will receive in death proceeds.

Let's discuss how you feel about it.

My initial recommendation would be to reduce the death benefit to \$300,000 or \$250,000, just low enough to keep the policy death benefit from having to be reduced because of the term insurance.

Policy

HYBRID Whole Life Paid-up at 98

Insured: Mary Smith

Policy Date: 1/28/97

Issue Age: 61

Standard Health Class

Original Death Benefit: \$500,000

- \$100,000 Base Whole Life
- \$400,000 Term Insurance

Current Death Benefit: \$250,000

- \$128,567
- \$371,433

Cash Value: \$88,122

- Guaranteed Cash Value (Base Policy): \$42,305
- Dividend Cash Value: \$45,817

Premium: \$9,669

Recommendation

Based on the review and analysis of the illustration I would recommend continuing the policy and pay the current premium of \$9,669. This will maintain the policy death benefit until age 98. At that time the term insurance will need to be reduced because you cannot pay any further premiums because the contract only allows premiums until age 98. The death benefit will reduce to \$440,617 at age 99 and to \$123,352 at age 100.

Analysis

The term insurance on the policy can be supported by paying the annual premium of \$9,669 assuming the current dividend scale. The policy is a Hybrid Whole Life Paid-up at 98 policy. This means that the premium for the base whole life contractually stops at that time. Since there would still be some term insurance left on the policy at that time you can support the cost and maintain the death benefit of \$500,000 but the premium at 99 would be \$37,448 and at age 100 the premium is \$358,247.

I would also recommend we request current in force illustrations with the 2015 dividend scale which would have recently been announced.