

There are two types of life insurance. "Whole" life provides coverage throughout life while "term" life provides coverage for a set number of years. Whole life policies are much more expensive than term life. For example, in the case explained below, the insured was paying annual premiums of \$8898 for \$280,000 in coverage. That same coverage to age 65 would cost \$380 annually. Most people don't need life insurance after retirement because there's no future earnings to insure.

Unlike term, whole life policies also slowly accumulate a cash value. This cash value can be withdrawn tax free up to the amount of total premiums paid into the policy. For example, you have a policy with a \$100,000 cash value and you've paid \$50,000 in total premiums. You could withdraw \$50,000 tax free since the money going in was already taxed. Any additional withdrawals are taxed as income and not as a capital gain. One way to avoid the tax is to, instead, take a loan from the insurer using the remaining cash value as collateral. However, there are serious disadvantages to this which are discussed below.

Life insurance salesmen can be very aggressive in pushing whole life and it's not hard to see why. They'll generally get 60% to 80% of the first year's premium as their commission and thereafter a smaller trailing commission. An aggressive salesman can pitch a policy as the perfect solution to many things. One solution that's pitched is as a retirement funding plan where the policy holder takes tax free withdrawals from the policy in retirement. Next is an analysis of one such scheme.

The insured was 44 when the policy was pitched. He was told that it was a great way to invest in what the salesman called "private" bonds. I'm assuming he meant corporate bonds. The salesman argued these bonds are more likely to keep up with inflation than government bonds. This claim is flat out wrong. Corporate bonds have NO mechanism to keep up with inflation. Though, they pay a higher yield because they're riskier. However, US Treasury Inflation Protected Securities (TIPS) are government bonds that DO keep up with inflation. They can be purchased easily without cost or commission or you can hold them in a TIPS mutual fund for an annual cost 0.04% (\$4 per \$10,000 invested per year). Plus, there are dozens of low cost corporate bond mutual funds if that's what you're after.

Below is an illustration provided by the salesman that I copied into Excel. It shows how this plan would work. Annual premiums of \$8898 are made for 21 years to age 65. There'd be withdrawals of \$48,589 every five years beginning at age 67 through age 92. The first three withdrawals and part of the fourth are a return of the premiums paid so no taxes due. The remainder of the fourth and all of the fifth are loans from the insurer. No tax since they are loans and not withdrawals.

	Death benefit	Cash value
45	280,000	
46	280,000	4,634
47	280,000	6,254
48	280,000	12,304
49	280,000	18,697
50	280,000	25,460
51	280,000	32,870
52	280,000	40,903
53	283,755	49,579
54	289,310	58,890
55	295,431	68,795
56	302,116	79,332
57	309,350	90,509
58	317,166	102,363
59	325,549	114,897
60	334,505	128,033
61	343,897	141,608
62	353,725	155,620
63	364,037	170,111
64	374,842	185,185
65	386,086	200,631
66	277,631	205,446
67	218,315	163,875
68	224,820	171,155
69	231,488	178,701
70	238,332	186,528
71	245,366	194,641
72	189,518	152,313
73	195,112	158,448
74	200,904	164,783
75	206,897	171,321
76	213,087	178,070
77	159,542	134,509
78	164,270	139,698
79	169,110	145,043
80	174,052	150,541
81	179,085	156,187
82	129,132	111,305
83	132,316	115,082
84	135,559	118,930
85	138,881	122,864
86	142,303	126,895
87	94,777	79,936
88	95,839	81,540
89	96,903	83,115
90	97,963	84,655
91	99,004	86,153
92	48,933	36,513

This shows the death benefit and cash value over time. Both are increasing to the first withdrawal. The insurer is currently paying a 5% dividend. The dividend is not like that paid on common stock or a savings account. Rather it's a return of premium if the insurer finds itself with surplus earnings. The cash value increases at less than the dividend rate due to insurer costs.

At age 46, he's paid \$21,874 into the policy (he made an upfront payment of \$4078) and only has \$4634 to show for it. The rest was used to pay the salesman's commission and admin expenses. Of course, he also has the value of the death benefit but that could have been purchased with term life for \$380.

By age 65 the cash value, which is what he'll rely on in retirement, has grown to \$200,631. We can determine the annual rate of return needed to grow the upfront payment plus 21 annual premiums of \$8898 to \$200,631 using the Excel "Rate" function. The answer is only 0.44%. The rate increases to 0.87% if I subtract the \$380 cost of term life from the premiums since there's still the value of the death benefit.

One variable in this is the policy dividend rate which was 5% as of this writing in Sep '23. In no way is this rate guaranteed. You could end up with a higher or lower cash value.

Cash flow		
45	-13656	
46	-8898	
47	-8898	
48	-8898	
49	-8898	
50	-8898	
51	-8898	
52	-8898	
53	-8898	
54	-8898	
55	-8898	
56	-8898	
57	-8898	
58	-8898	
59	-8898	
60	-8898	
61	-8898	
62	-8898	
63	-8898	
64	-8898	
65	-8898	IRR
66	0	
67	48589	-13.16%
68	0	-13.16%
69	0	-13.16%
70	0	-13.16%
71	0	-13.16%
72	48589	-4.74%
73	0	-4.74%
74	0	-4.74%
75	0	-4.74%
76	0	-4.74%
77	48589	-1.59%
78	0	-1.59%
79	0	-1.59%
80	0	-1.59%
81	0	-1.59%
82	54464	0.22%
83	0	0.22%
84	0	0.22%
85	0	0.22%
86	0	0.22%
87	64785	1.43%
88	0	1.43%
89	0	1.43%
90	0	1.43%
91	0	1.43%
92	64785	2.16%

The above determined the rate of return needed to grow the premiums to the cash value. Next, we'll calculate the rate of return needed to grow the premiums to equal the retirement withdrawals.

At left are the annual cash flows. Premiums to age 65 and withdrawals thereafter. The third column shows the Internal Rate of Return (IRR in Excell). The IRR tells us the rate of return that the premiums must earn in order to make the payments to the ages shown.

The first three payments are a return of what the insured paid in so they're not taxable. Part of the fourth and all of the last are tax free loans so I've put these on a pretax basis. In other words, how much would you have to withdraw at a 25% tax rate to be left with \$48,589.

The insured finally got his money back at age 82 when the IRR breaks 0%. It's 2.16% if he makes it to 92. In other words, he could get larger payments if he invested his premiums in something earning more than 2.16%.

What happened? Simple, life insurance is just that. As the actuary at the Consumer Federation of America's Evaluatelifeinsurance.org told me "if life insurance isn't needed, it can't work as a retirement plan". The associated costs are too high.

Tax free is easy to sell to many people who don't know how to value it. However, the cost of this tax-free product, as well as most others insurers pitch like variable annuities, is more than the tax it avoids.

Important: this loan scheme can cause a policy to collapse due to insufficient funds to support the cost of insurance. When that happens, the insurer will ask for additional funds to support it. **The loans will be taxable as income if the policy collapses.** In this case we asked the insurer for an illustration with withdrawals low enough to ensure it doesn't collapse. Again, things could turn out differently if the current 5% dividend rate drops.

