

# The Nitty-Gritty of Permanent Life Insurance

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Chris Reed

[www.retailinvestor.org](http://www.retailinvestor.org)

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## **Abstract:**

This article describes 'what is happening' in Term-to-100 and Whole Life insurance contracts. It uses the example of a healthy 30 year old male to illustrate concepts and conclusions. The issues that impact the account's value are tracked year by year.

The reasons and situations for buying permanent insurance are evaluated for their validity. Lapse rates are revealed as an indication that these products are over-sold. The calculation of Cash Surrender Values is shown to be only a small percentage of the account's cash reserves, so that lapsed rarely recover anything. Loans are shown to have no value, and expose customers to tax risks.

## Table of Contents

PERMANENT INSURANCE HAS A PLACE.....	3
TYPES OF PERMANENT LIFE POLICIES.....	4
Term-to-100 (T100) .....	4
Whole Life (WL) .....	5
From the Issuer’s POV.....	6
Universal Life (UL).....	8
WHY BUY? .....	8
Valid Reasons to Buy Permanent Insurance .....	8
Buy Term and Invest the Rest .....	9
Wrong Reasons to Buy Permanent Insurance.....	10
(1) Pay Funeral Costs.....	10
(2) Avoid Probate .....	10
(3) Finance Taxes on Death .....	10
(4) Guaranteed Benefit .....	11
(5) Flexibility Later in Life .....	11
(6) Because You Love Your Family .....	12
(7) Before Health Problems Disqualify You .....	12
(8) Cheaper to Buy When Young .....	12
(9) Shelter Investment Profits from Income Tax .....	12
CONCLUSION: .....	13
LAPSES – dirty little secret #1.....	13
CASH SURRENDER VALUE (CSV) – dirty little secret #2 .....	15
Is the CSV Equal To Your Cash Reserves?.....	15
Should You Lapse? .....	16
Income Taxes on CSV Draws .....	16
Conclusion.....	17
LOANS .....	18
Conclusion.....	20
SUMMARY.....	20

## PERMANENT INSURANCE HAS A PLACE

No one disputes the value of term life insurance for discrete periods when a death would leave someone in financial trouble. Maybe your home's mortgage could not be supported by your spouse's income alone. Maybe your child's daycare and university could not be financed with just the one paycheque. Maybe your business partners would need cash to buy out your business interest from your inheritor. You are buying insurance against the possibility of death during that discrete period. Policy benefits flow to those who die.

The disputes start when considering permanent insurance that continues until death. This is not insurance against possible death. Death is certain. Permanent insurance protects against the risk of early death. Those who die early benefit at the expense of those who live long.

*The charts used throughout this article reflect a level-premium \$100,000 policy for a 30 year old healthy male, quoted by the same Canadian issuer in December 2016. The two types of coverage are Whole Life (WL premium \$730.08) and Term-to-100 (T100 premium \$692.28). All the data and charts following come from a public spreadsheet where you see the calculations.*

<http://www.retailinvestor.org/xlsxSecureCopy/PermanentLifeInsurance.xlsx>

Since the premiums for both policies are very similar, the returns in figure 1 below overlap. Those who die before age 47 after less than 17 years of premium payments, realize returns on those investments that are literally off the chart. There is no way that any DIY investment could have earned more than 20% yearly after tax. The problem is that less than 20% of the cohort will die by early 70's to earn 5%.

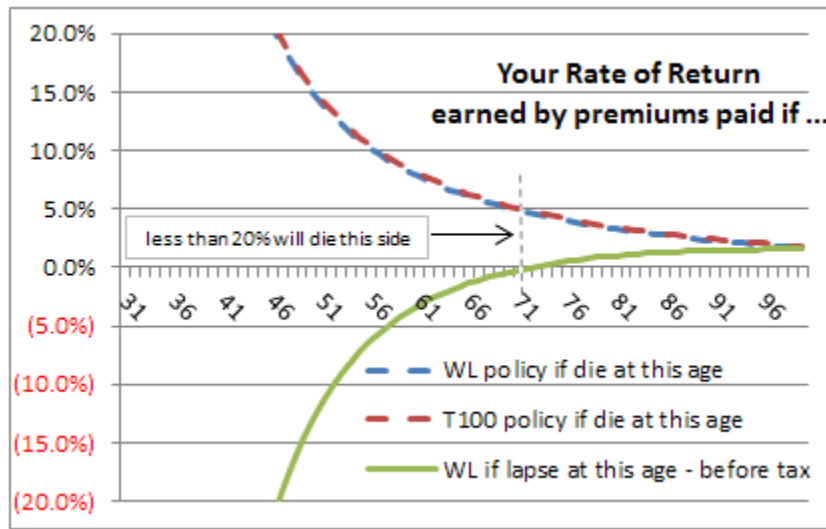


Figure 1

The numbers for figure 1 come from the stipulated-by-contract \$ premiums, \$ death benefit and \$ CSV. At the end of the day these are the rates of return you care about (in addition to risk reduction).

The issuer's internal math shows they must earn at least **3.5%** to finance these policies, keeping any extra return for overhead and profits. At that same rate of return (after tax) you could do as well (\$100,000), but only if you don't die before age 86. Permanent insurance really pays off when you die early ... but not so much for those who live longer. The continuing premium payments year after year destroy the policy's profitability.

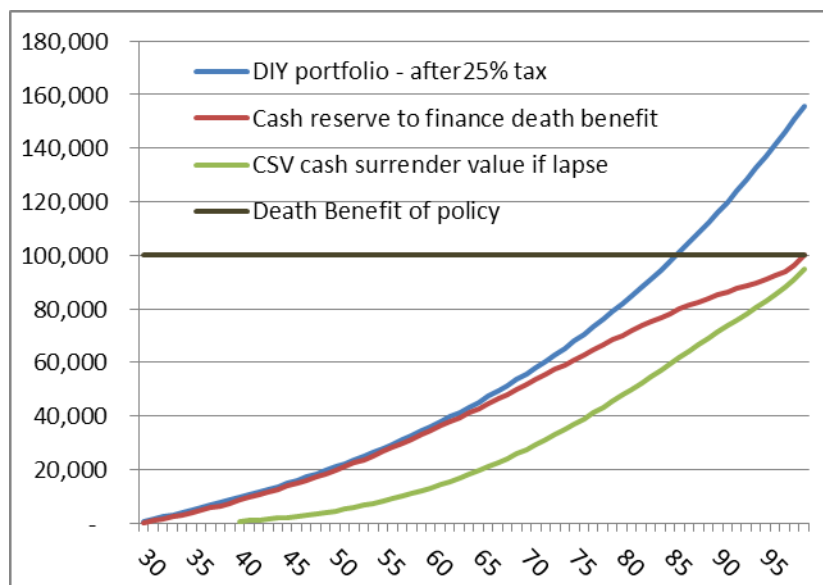


Figure 2

Year-by-year comparisons of insurance vs. DIY investments produced by brokers often stop their tracking at age 85 – exactly when DIY investments start out-performing.

## TYPES OF PERMANENT LIFE POLICIES

### Term-to-100 (T100)

Term-to-100 is the simplest type of permanent life insurance. Its stipulated level premiums are paid until age 100. When you die your beneficiary receives the stipulated tax-free death benefit. If you fail to pay the premium the policy lapses and you walk away with nothing.

There is no actual account with your name on it, but you can think of it conceptually in order to understand what is happening behind the scenes. At the start, the premium is larger than what is needed to finance the death benefits of the very few who die. The over-payment starts a growing cash reserve.

Each year, the premium you pay goes into your account. This growing account is invested to earn additional profits. From the account are paid the issuer's expenses – sales commissions (calculated on premiums <sup>1</sup>), about 2% Provincial tax (on premiums <sup>2</sup>), 15% income tax (on investment profits <sup>3</sup>), and other yearly fees.

Each year a percentage of the group of customers just like you (your cohort) dies. Actuarial tables predict exactly what that percentage will be for each year as you age. If 1% of your cohort dies, each of you chips in 1% of the death benefit to pay those death benefits.

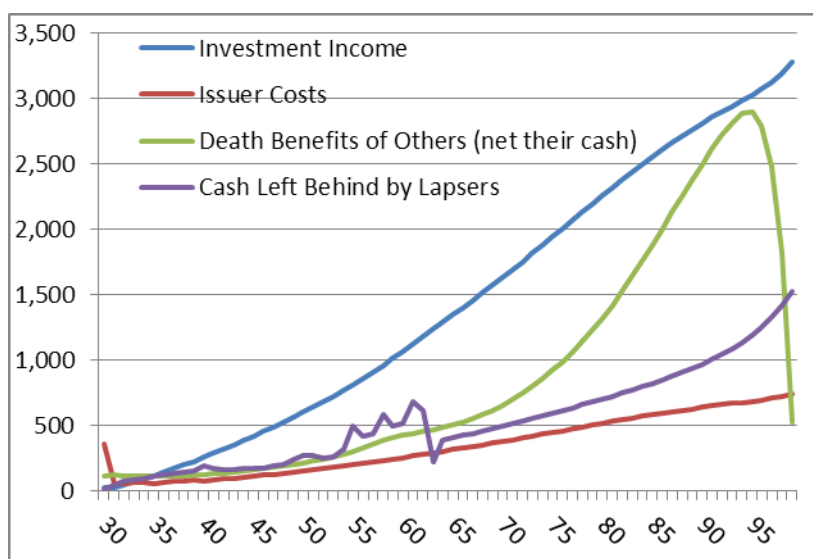


Figure 3

But everyone who dies will have accumulated his own cash reserves. That cash gets shared among those remaining alive. As the cohort ages cash reserves increase while a greater percent die each year. The net cost for the others, death benefits in excess of cash reserves, doesn't get out of hand.

Each year a percentage of the cohort allow their policies to lapse. Since they walk away with nothing, the cash reserves they had accumulated are left behind and shared among those remaining.

Net of all six issues, the cash reserves of those who survive continually increase. Policies are priced so that the last people alive at age 100 have cash reserves that can self-finance their own death benefit.

### Whole Life (WL)

A whole life policy is essentially the same with one additional benefit – the Cash Surrender Value (CSV). When you surrender a policy you don't walk away with nothing, you get the stipulated CSV (although it is not paid out at death in addition to the policy's face value). The CSV also acts as collateral for policy loans from the issuer, or normal loans from 3<sup>rd</sup> parties. Its value is pre-set in the contract for each year. WL premiums are larger than T100 by about 5% or 10% in order to pay this CSV to those who lapse.

Customers have various choices regarding the payment of premiums. The level premiums example used here allows for an easier analysis and comparison of policies. Another option is flat premiums for a limited number of years, at which point the policy is 'paid up', meaning that no more premiums will ever be required - guaranteed. Another option called 'Participating' or PAR, has the issuer return part of your (larger) premium each year in certain situations.

### From the Issuer's POV

'What is happening' looks quite different from the issuer's POV. The description above looks at one customer. But the issuer looks at the cohort in total because the actuarial risks they face are offset by averages. Of prime importance is the mortality rate at different ages. The mortality rate is the slope of the line in figure 4 below. It is the ratio of (the # who die) over (the # alive at the beginning of the year). People don't start seriously dying until their 70's, so policies sold to 30 year olds with level premiums have lots of time to accumulate cash in anticipation.

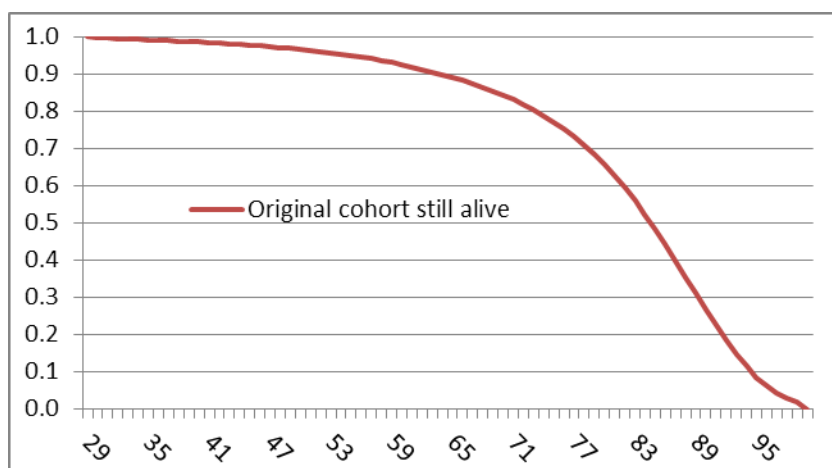


Figure 4

In figure 5 below, the red line shows how the death benefits paid skyrockets as the mortality rate increases in people's 70's. But the by-product of higher mortality rates is a smaller cohort still alive. The peak in benefits paid is the inflection where the cohort size is declining in number at a faster rate than the mortality rate is increasing.

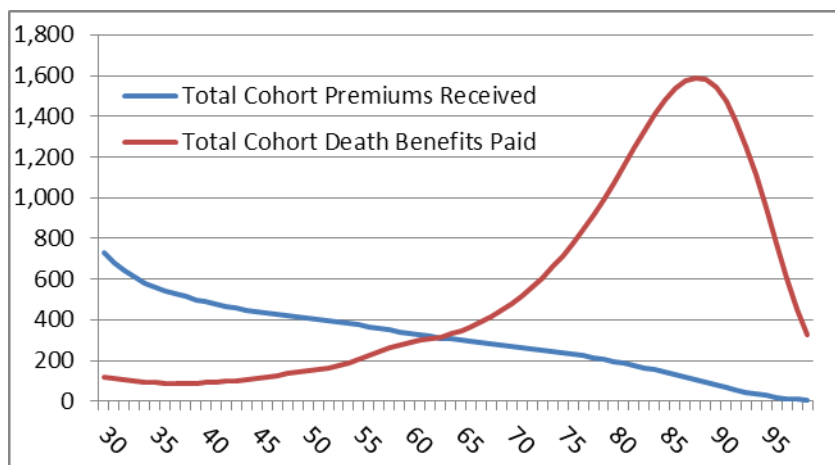


Figure 5

Everything comes down to the accumulation of enough cash to payout all future claims for death benefits. The cash comes from both premiums and investment profits. The left side of figure 6 below shows the cohort's total cash reserves. They build up in the early years, and draw down as benefits are paid in later years.

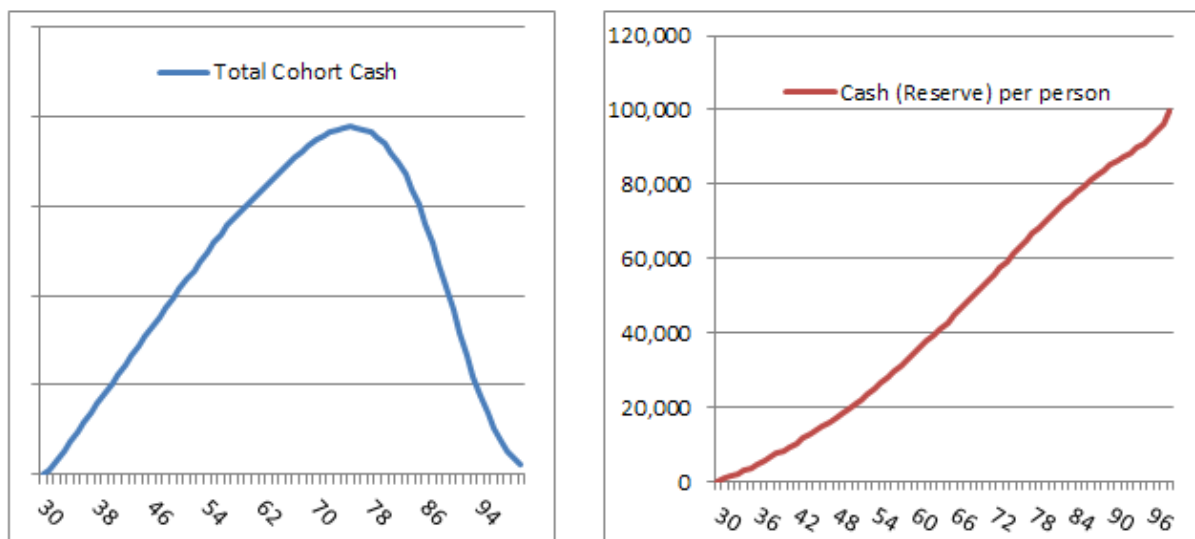


Figure 6

The exact same data is presented on the right - but on a per-person basis. In later years as the cohort's total cash declines, the cohort members die at ever faster rates. Those remaining get a bigger piece of the smaller pie. They continue to accumulate cash so they can fund their own death benefit.

## Universal Life (UL)

Universal life policies are not discussed further here. They are a synthetic combination of either a Term or WL policy, with a DIY portfolio of investments on the side. The stipulated Cost of Insurance (COI) and account charges deducted each month should equal the premium of the same stand-alone Term or WL policy. Customers need to verify that because brokers are unlikely to have. It is only the insurance part of the policy that matters here.

If the UL contract states a 'guaranteed' CSV for each year, then it is backstopped by a WL policy. Its total CSV would be the sum of that guaranteed cash from the WL policy plus the value of the DIY portfolio. An example would be the ManuLife's 'UL Level Client Investment Select' or Industrial Alliance's 'EquiBuild UL'. As with WL policies, the guaranteed CSV is not paid out on death.

If the UL contract makes no mention of any guaranteed CSV then it is backstopped by a Term policy. Its total CSV is only the value of the DIY portfolio. The term policy can be a T100 with level insurance premiums. An example would be 'SunUniversalLife'.

Some UL policies are backstopped by 100 yr Term policies that are NOT the level-premium type. Instead the COI is the actual mortality rate at each age, just as if people bought successive 1-year term insurance. These should be avoided like the plague because of the parabolic increase in mortality rates at older ages. Look out for 'YRT' (Yearly Renewable Term) or 'AI' (Annual Increasing). They look great at younger ages, but the broker's example will end at age 80's so you don't see what happens next.

## WHY BUY?

### Valid Reasons to Buy Permanent Insurance

It is generally accepted that when faced with a liability that won't go away and a survivor will be left with financial difficulty, permanent insurance can be a perfectly valid choice.

One situation that satisfies the two criteria would be the Mom with a disabled child who will need care his whole life. This liability is not going away. If Mom dies early before being able to fully fund a trust, the child's support will be limited to government programs.

A second situation is where assets need protection from creditors. It is difficult to promote actions designed to screw deserving people. Regardless, before buying life insurance for this reason, consider the protection of trusts and corporations, investigate bankruptcy and consider transferring ownership of assets to friends and relatives. The protection of insurance is not absolute. Read up from this list.<sup>4</sup>

Third, a Permanent Life policy adds diversification. Its benefits kick in when bad things happen to you. The two offset each other. But nobody takes up sky diving 'because they have life insurance'. Life is full of bad things, so everyone takes reasonable precautions. The important question is the cost of the precaution. Paying life insurance premiums diverts savings from other uses that increase other risks. Investing in life insurance must 'pay off' to offset your opportunity cost. For rich people with no other use for their money and no opportunity cost, buying insurance is a net positive.



## Buy Term and Invest the Rest

Many permanent policies are bought to insure liabilities that will not last a lifetime. A heck of a lot can change in the possibly 70 years before you die. Most liability exposure eventually disappears.

- The mortgage gets paid off.
- The dependent child grows up to be self-supporting.
- You retire from your business so your partners need no funding for a buy-out.
- The stay-at-home Mom who used to need Dad's pay cheque can rely on his pension after the bread-winner's retirement.
- The parent with Alzheimer's disease eventually dies.
- The perception that insurance on a child's life is necessary to fund a leave of absence, becomes a non-issue when you retire and no longer earn a wage, or when you realize that your mental health would depend on forcing yourself back to work with its pretense of normality.

At this point the classic advice is to *'buy term and invest the rest'*. In other words, buy insurance for the period when the liability exists only. Because the shorter term premiums are smaller, you DIY invest with the cash savings.

The exact outcomes depend on what rate of return you presume your DIY portfolio will earn. There is no need to presume the same low rate implicit in permanent insurance. You can accept more risk just like you invest other savings. Whether the profits are taxed or not is a personal variable depending on your room in tax shelters.

Figure 7 below compares your wealth at death. If you buy the T100 permanent insurance you are worth \$100,000 no matter at what age you die. If you buy a T20 policy for a short term liability, then your wealth drops drastically when the policy ends. It takes 22 more years before the DIY portfolio recovers to \$100,000 – but then you don't need the \$100,000. If you buy a T40 policy for a longer duration liability, then your wealth recovers above \$100,000 within 5 years of the policy end.

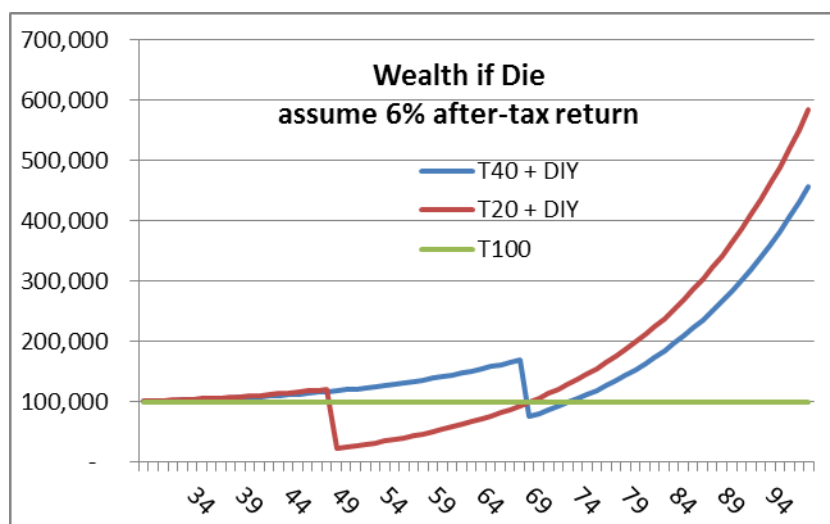


Figure 7

In both cases, buying the short term T20 and T40 gives you the guaranteed wealth during your critical period. Importantly the DIY portfolios allow for huge gains in wealth later. Buying permanent insurance greatly limits your upside potential.

## **Wrong Reasons to Buy Permanent Insurance**

Most detractors think there are precious few situations where permanent insurance is the best option. Here are the counter-arguments to 9 common sales pitches.

### ***(1) Pay Funeral Costs***

Many people argue for buying insurance to fund funeral costs. If a funeral costs \$15,000 the emergency funds of two people will pay for it – the insured and the executor. The executor can recover his costs from the estate. If the estate is not worth \$15,000 then that person had no business buying life insurance. His priority should have been the here and now of life. Tell those who call you *“a selfish dick who doesn't even want to pay for his own funeral”*<sup>5</sup> to find a better sales pitch. You don't buy insurance against certainties that can be self-financed.

### ***(2) Avoid Probate***

It is true that savings inside life insurance protect beneficiaries from the cost of Canadian probate tax on death. But there are better ways to accomplish the same thing. It is cheaper to bypass probate on any material estate by putting assets in joint ownership, or using trusts.

Life insurance comes with a large opportunity cost from lost up-side. Figure 2 above show the DIY portfolio only surpassing the insurance policy at age 86, but change the assumptions to 0% tax, or to the larger rate of return most people's investments earn, and the lines cross in your 60's. Trusts don't have this cost.

### ***(3) Finance Taxes on Death***

Financing a tax liability arising on death is a common reason to buy permanent insurance, but there are few causes for this tax. One is an RRSP account that is brought into taxable income at death in its totality. Another is real estate not sheltered from tax as a Principal Residence. This might be the country cottage, or a snow-bird's home in Florida. All accrued capital gains will be taxed on death.

There are two problems with using life insurance. The first is to decide whose life to insure. Canadian tax allows accrued gains to be passed un-taxed to any surviving spouse, so it is only of the second spouse's death that the tax becomes due. A joint policy is necessary. The second problem is that accruing tax liability, by its nature increases over time as the asset itself increases in value. The policy coverage needs to be increased regularly.

But is this really a situation for insurance? Yes there is an ongoing liability. But no survivors will suffer financial hardship. Taxes are just a portion of the value of the asset giving rise to the tax. Selling the asset will cover the tax costs. How often can that asset not be sold?

The industry always identifies the family cottage as this asset that cannot be sold. But is this not harkening back to the ‘good old days’ when Mom and the kids spent the summer at the cottage and Dad worked in the city and visited on weekends? Today, Moms work just like Dads. Today, the kids prefer computer camp to the cottage with no internet access. Today, second generations move to another province and have no ability to use the family cottage.

In the very limited situations where the cottage is valued by the second generation, there are ways to transfer ownership long before your death – and lower taxes in the process. Doing so early allows control to pass to the generation actually using the cottage.

#### ***(4) Guaranteed Benefit***

There is a common argument that you should buy permanent policies because if you don’t die within the policy’s term, you will have wasted years of premiums. They argue that *‘the best life insurance is the policy that exists when you die’* - so that you are assured to recover the Death Benefit.

*“The most obvious benefit of permanent insurance is the enduring nature of the coverage. Unlike term insurance, in which claims are only made and paid out on a small fraction of policies, clients who buy permanent coverage can be certain that their beneficiaries will one day receive the benefits of the policy, as long as the policyholder keeps it in force.”<sup>6</sup>*

This logic is false. You do not buy insurance against a sure thing. Death is a sure thing. You buy insurance to reduce the risk of a disaster (early death in this case) – even while hoping the disaster does not happen. The fire insurance you buy every year on your home is not wasted just because there is no fire.

#### ***(5) Flexibility Later in Life***

One ludicrous reason to buy Permanent insurance is the completely false claim that WL policies offers *“flexibility later in life”*.<sup>7</sup> The opposite is true. DIY investing allows flexibility. Your money can be used when, and for what, as you like. In contrast life insurance locks away savings never to be seen again until after you are dead, when the next generation is well on its way to being dead, at which point their finances are settled and unlikely to need your money.

The industry’s claim that you can ‘borrow’ from your insurance account is false. Any borrowing done is from either the issuer or a bank. You pay interest to those lenders, just like you pay interest on any other normal borrowing. You would not have to borrow in the first place if you had a DIY portfolio.

Sure you can withdraw the CSV from WL policies, but that means forfeiting the cash reserves you must leave behind. And withdrawing the CSV cancels your insurance contract. This is either/or. You maintain your insurance, or you take the CSV and lapse.

### ***(6) Because You Love Your Family***

The always-effective sales pitch is an emotional tug at your heart strings ... because “*you want to leave a legacy for your kids*”, or because “*you want your estate to make a large charitable donation*” all because you ‘care’, because ‘*you love your family*’. The implication being that if you don’t buy the policy then you are an uncaring heel, thinking only of yourself.

There is no need for insurance to accomplish these goals. You can save your money in a DIY portfolio. Most importantly you take care of your own changing needs in an unknown future. If the gods smile on you then there will be funds for legacies. If not then at least you will be self-sufficient. The next generation can take care of themselves – as they should.

### ***(7) Before Health Problems Disqualify You***

Some argue that permanent insurance should be bought early, even though not needed immediately, before possible health problems are known that would disqualify you from buying insurance later in life. They probably expect you to buy WL with its CSV instead of T100. Essentially they want you ‘*to buy insurance to cover the risk of not needing the insurance that you bought to cover the risk of not being able to buy insurance*’. Does that sound like good advice to you?

Is access to life insurance really a necessity, much less a priority? Remember that it only pays out after you are dead. Surely your more pressing obligation is to finance medical treatment to stay alive. When you have a medical condition making your life span iffy, you would not assume the types of financial responsibility for which life insurance is needed.

### ***(8) Cheaper to Buy When Young***

A similar argument says to buy permanent insurance when very young because you lock in very low premiums. Sure the yearly premiums are lower when buy young, but you must pay those smaller premiums for many more years. These pointless extra years of payments far outweigh the smaller premium.

A T100 policy bought at age 10 costs \$ \$ 393.12 forever. It is better to invest that money in a DIY portfolio. At age 30 when you need insurance you can start drawing the \$692.28 premiums (for a 30 year old) from that portfolio. As long as the portfolio earns more than 2.3% it will last until age 100.

### ***(9) Shelter Investment Profits from Income Tax***

The industry makes a big deal about the ‘fact’ that insurance products shelter you from tax. But just because you never see a line item on a statement deducting tax, doesn’t mean insurance is a tax shelter.

- You pay premiums with after-tax savings, just like normal investments into a Taxable investment portfolio.
- Death benefits paid are tax free just like you can withdraw the principal from your Taxable investment portfolio tax free.
- Investment profits earned inside an insurance company are taxed at 15%. Issuers incorporate that cost in the pricing of their products and in the form of MERs, or transaction fees.

- Canadians in the top tax bracket face an effective tax rate of 31% (assuming the preferential rates for capital gains and dividends). So they do save half the tax on profits. However, those in the second tax bracket face only 13.5%, so the tax rate paid in insurance is larger.
- Investment MERs of the DIY portfolios in UL policies are often 2.5% of the portfolio's value. That is the same as a 31% income tax on profits of 8%. Who would you rather pay, the insurance company or the government who uses the funds to provide all our services?
- The dollars borrowed from a policy are tax-free... just like all other borrowings are tax-free.

But taxes are a diversion. Your return from life insurance is hugely variable depending on your age at death. Remember figure 1 showing off-the-chart returns if you die early, and 2% returns if you die late. The impact of taxes is immaterial.

### **CONCLUSION:**

There are plenty of reasons to buy permanent insurance that could be considered more like 'excuses'. To some extent these are subjective points of view. But most have errors in logic, fact or math. There are better options. The reality that many people do buy permanent insurance because of these arguments does not make them valid.

### **LAPSES – dirty little secret #1**

The proof that permanent life insurance is 'sold' for the wrong reasons, and not 'bought', lies in the reality that more than half of all customers allow policies to lapse without claiming a death benefit. Their original reasons for buying the policy fail to pass the test of hard reality.

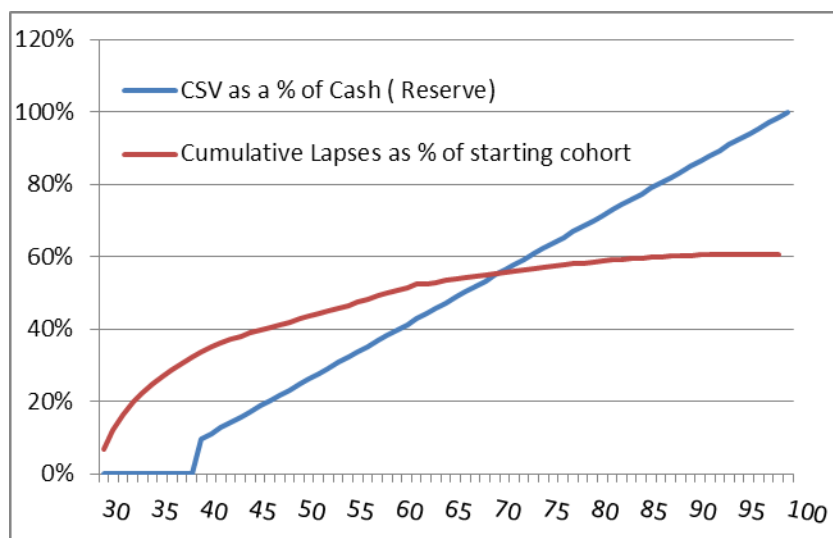


Figure 8

The red line of figure 8 above tracks the cumulative lapses according to the industry research. Most lapse in the first few years. The rate falls off to stabilize at about 1%. Many are triggered by background shocks that were not anticipated at the time of purchase. Unemployment, new dependents, or medical costs create a need for liquidity. The death of a dependent, increase in a spouse's income or divorce takes away the liability. Life happens.

The blue line measuring the CSV as a percent of the cash reserves will be discussed in the section below on Cash Surrender Values.

The insurance industry studies lapse rates because they are such a huge factor in the pricing of products.<sup>8</sup> They have the biggest impact in T100 policies because these customers walk away with \$0 when lapsing. Their accumulated cash reserves are 'shared' among those remaining.

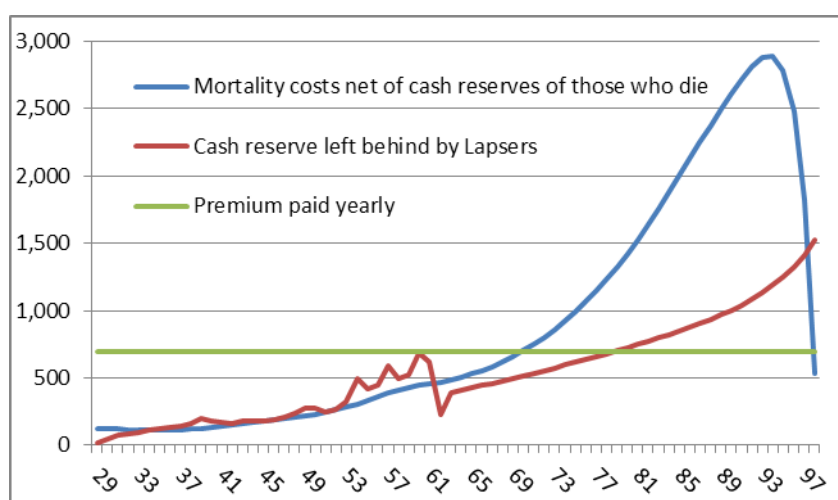


Figure 9

Figure 9 pulls two lines from the figure 3 far above. A line showing yearly policy premiums is added to show relative importance. The cash left behind by lapsers is large enough to fully fund mortality costs for the first 30 years. In later years, even though the lapse rate has fallen to 1%, because cash reserves have grown so large, the value of the reserves left behind by lapsers is far more important than policy premium payments.

The T100 policy example used here costing \$692.28 would have to be priced at \$993.72 if nobody lapsed. That is 43% higher! That is a huge transfer of wealth from those who lapse to those who remain. This is why the insurance industry lobbies to ban the life settlement industry (secondary market buying unwanted policies) despite the liquidity they provide.

## CASH SURRENDER VALUE (CSV) – dirty little secret #2

The promise of being paid a CSV if you ‘want out’ of your WL policy, is the ultimate sales pitch. It is the attractiveness of this attribute, coming at almost no cost, that has caused T100 policies to be ignored in favour of WL.

### Is the CSV Equal To Your Cash Reserves?

So how wonderful is it? Every public description implies that your CSV will roughly equal the cash reserves accumulating in your account. The experts use the term ‘cash value’ to mean ‘CSV’ or ‘cash reserve’ interchangeably. At best they mention that ‘a portion’ of the cash reserve is retained by the issuer. Here are some typical descriptions.

*“The premiums of a permanent insurance policy cover not only the raw cost of insurance, but are partially allocated to a reserve that help to cover future costs of insurance. If a consumer walks away from the policy, that reserve is available in the form of a policy cash value that can be paid if/when the policy is surrendered.”<sup>9</sup>*

*“The cash value, also called the cash surrender value, will often be similar or even equal to the reserve to be held by the insurance company for the net obligations from the contract.”<sup>10</sup>*

*“Surrender values are set in the primary market for life insurance, which can be characterized as having relatively high degrees of competition. This competition among insurance carriers in the primary market drives both the premiums and terms of life insurance policies to roughly competitive levels, and surrender values are set to roughly correspond to the surplus value that builds up in policies over time. Stated differently, the “price” that a policyholder receives for the surrender of his whole life policy is roughly the amount by which the payment he has made to the insurance company exceed the actuarially fair cost of his insurance.”<sup>11</sup>*

Absolute garbage! Look back at the blue line in figure 8 above. In reality the guaranteed CSV of a WL policy is only a fraction of your cash reserve. Most issuers allow you \$0 CSV for the first 5 or 10 years of a policy. The following year CSV will roughly equal one year’s premium payment, or 10% of the cash reserve. The proportion increases steadily to reach 100% at age 100. But most all the lapses happen in the early years when little, if any, CSV is paid.

Period of time	% of Original Policies that Lapse	Average CSV / Cash Reserve ratio
First 5 years	23%	0%
First 10 years	32%	0%
First 30 years	50%	8%
All	61%	17%

The low CSV payments are especially egregious for those who lapse because poor health requires a diversion of cash from life insurance premiums to life sustaining medicine. These people would otherwise expect to collect the death benefit very soon. The sick 67 year old who would expect a \$100,000 death benefit in a few years, who has paid premiums for 37 years, and accumulated almost \$45,000 in cash reserves, is forced to walk away with CSV = \$22,400.

### Should You Lapse?

This low payout explains why the WL premium is only 6% larger than the T100 premium. Remember above where T100 premiums would need to be 43% higher if there were no lapses? In WL policies, if 100% of the cash reserves were paid out on lapse, there would be no cash left behind and no benefit from lapsers. It would be the same as if there were no lapses. WL premiums would need to be 43% higher than T100. They are not ... because the CSV pays out pittance.

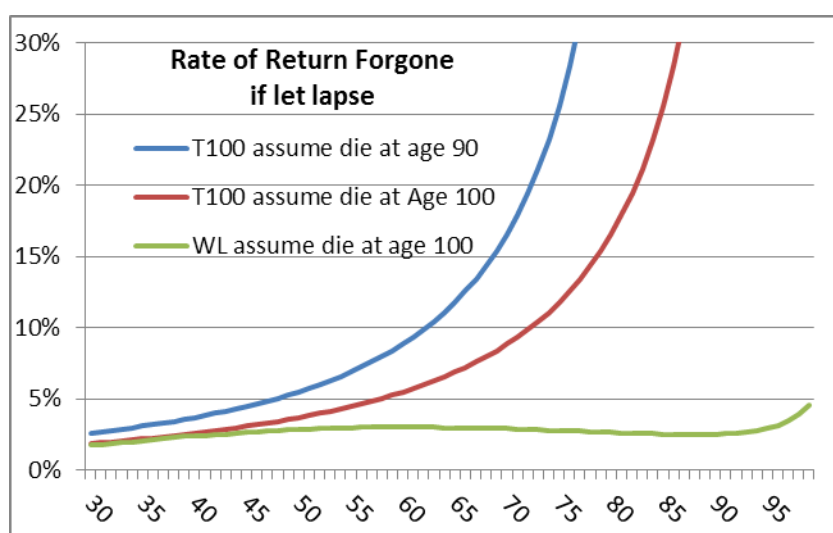


Figure 10

There is reasoning behind the low payouts. In figure 10 above you see that with T100 policies the opportunity cost of lapses increases exponentially as you get older and face fewer premium payments before recovering the death benefit. This is a huge dis-incentive to lapse. On the other hand WL policies encourage you to lapse. They offer just enough CSV so that the opportunity cost of lapses is minimal. Each choice to remain includes the 'cost' of not claiming the CSV.

### Income Taxes on CSV Draws

To add insult to injury, the CSV you withdraw on lapse is taxed as income at full rates on all amounts in excess of the tax ACB (adjusted cost base). Partial surrenders, when you reduce coverage, have their taxed portion calculated at the same ratio, pro-rata. When policies lapse because debt has grown too large, the CSV will cover the debt, but not necessarily the taxes owing.



The calculation for ACB changed for policies written after 2016. Essentially the ACB equals the sum of all the premium payments you have made to date, less the sum of each year's net cost of pure insurance (NCPI).<sup>12</sup> The cost of insurance used to be based on the cash reserve. Now it is on the net premium reserve.

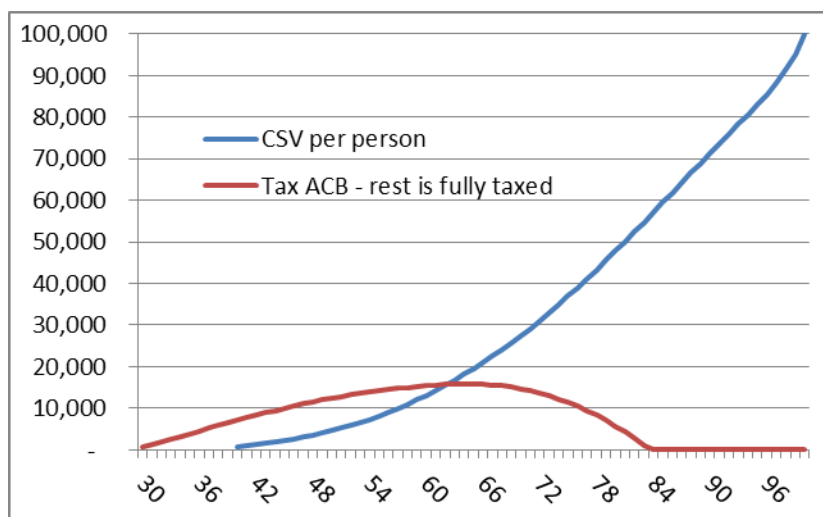


Figure 11

Figure 11 above assumes the new rules. The taxed amount widens drastically in later years, but the majority of people who lapse soon after purchase, should be able to recover their pittance tax free.

### Conclusion

The CSV is just a fraction of the extra money you pump into a policy with level premiums - level premiums that are necessary to handle the exponentially rising cost of insurance later in life. You don't 'get your money back' until you are in your 70's (figure 1 far above). You pay tax on any material amounts you do recover. The CSV is of no value to the vast majority who lapse early.

Beware of broker's year-by-year examples where the column titled "CSV" may not actually reflect that reality because additional surrender charges would be deducted.<sup>13</sup>

## LOANS

Neither 'policy loans' borrowed from the issuer, nor loans from banks, using the CSV of a WL policy as collateral, should be considered '*borrowing from yourself*'. This is debt like any other debt. You must pay interest to the lender – who is not you. And you must repay the debt at some time, maybe sooner than expected.

Like all debt, its attractiveness is determined mainly by the rate of interest charged. Policy loans are expensive. Manulife charges the greater of 8% and prime +2%.<sup>14</sup> The insurance broker may assure you that cheaper loans are available from banks, but people approaching banks report anecdotally that staff are unaware of this type of collateral. Enquiries get re-directed to insurance agents who can access programs like TD Canada Trust<sup>15</sup> and Manulife Bank<sup>16</sup>.

Policy loans have a second problem. For tax purposes they are considered to be partial surrenders of the policy.<sup>17</sup> The first dollars borrowed are considered to be from the tax ACB and free from tax. But further loans are fully taxed. Repayments of debt reinstate the tax-free ACB.

After borrowing you must pay both the policy's insurance premiums plus the policy loan's interest. Now the insurance broker assures you that the interest need not be paid because, if allowed to compound unpaid, the debt will grow more slowly than the CSV acting as collateral. Will it? No. After your mid 60's the CSV's growth rate will be lower than debt compounding at 8%.

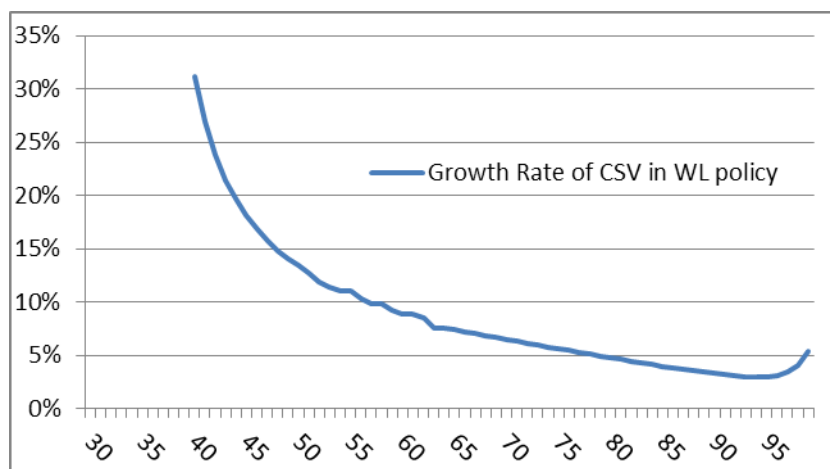


Figure 12

The industry most often fails to mention that the size of any outstanding debt must remain smaller than the CSV acting as collateral. When policy loans become larger than the collateral CSV the policy is collapsed, the loan is repaid and you are left with all the taxes that result. 3<sup>rd</sup> party lenders will also call their loans. Since you would not have borrowed in the first place if you had other funds, this means you must lapse the policy.

**Some Universal Life policies are bought with the intent from the start to borrow against the policy** with a 3<sup>rd</sup> party loan, e.g. for retirement spending. They are sold as an alternative to personal savings in a taxed account, promising tax-free growth for the side investments. The policies allow larger contributions than necessary for the insurance, so the side investments become large. When the UL policy has no guaranteed CSV, these side investments support the CSV that allows and limits borrowing.

For this idea to work two factors are critical. (i) During the period prior to the borrowing, the investments within the policy must earn a return comparable to a DIY personal portfolio. (ii) The interest paid on borrowings must be smaller than the profits earned by the assets in the policy assigned as collateral.

(i) Investment options within a UL policy vary between issuers. They are probably derivative exposures to a limited choice of assets, against which the insurer deducts a management fee. The MER may change with only a promise to not exceed 3.1%<sup>18</sup>.

That fee makes the DIY taxed portfolio preferable. At Canada's top tax bracket for incomes over \$200,000, the effective tax rate on a portfolio allocated equally between interest, dividends and capital gains is about 37.2%. An 8% return after tax equals 5.0%. The returns inside the policy would be 4.9%. For smaller assumed returns, the outcomes favour the DIY portfolio more strongly. Lower tax brackets favour the DIY portfolio more strongly.

(ii) Because the point of the exercise is to withdraw cash for spending, the interest on borrowings must compound unpaid. That requires continually increasing CSVs in the policy to cover the increasing debt. High risk assets promise higher returns, but after 3% fees are deducted even stock profits have a hard time keeping up with debt interest.

There is literally no tolerance for a year of portfolio losses once borrowings have been maxed. The only way to make the situation sustainable is to voluntarily limit borrowings to a lot less than the maximum allowed. Because of voluntary limits to borrowings, the limits imposed by 3<sup>rd</sup> party lenders (e.g. Manulife Bank lends only 75% of the net CSV<sup>19</sup>) will probably not have an impact until after market prices drop.

All of this makes the DIY portfolio look better and better. 100% of DIY assets are always available for spending. Poor market returns can be waited-out.

In the fine print of 3<sup>rd</sup> party lenders you may find ... "This is a demand credit facility, and therefore even if you maintain the Margin Ratio, we still have the right to demand payment in full of the Outstanding Balance at any time without giving you prior notice."<sup>20</sup> This is a big deal, and should not be dismissed. It is most likely the loan would be called when bad things are happening in your life; exactly when you can least afford the large tax costs from a forced policy lapse.

Pay attention to broker's year-by-year examples that purport to sell valid products, even while its numbers actually show the policy will be collapsed because of too-large debt.<sup>21</sup>

## Conclusion

Does it make sense to buy an insurance policy based on the idea you will borrow against it, when you must either pay income tax on policy loans, or count on some uninterested 3<sup>rd</sup> party to do the lending in the distant future; a party who might not be willing to lend, who may call the loan at any time?

Do not buy a permanent life policy expecting to borrow from it. Consider debt only as an escape route, possibly the best choice in a bad situation where you must access funds – a situation you maybe should not have got yourself into in the first place, by buying the policy.

## SUMMARY

Permanent insurance is a valid product in a very limited number of situations. It is over-sold with bogus claims that result in more than half the policies being allowed to lapse. The CSV that is promised on the lapse of WL policies is only a portion of the funds accumulated. Few lapsed benefit from it. The income tax consequences of partial withdrawals and policy loans can be severe, while the claims of tax-sheltering investment profits disappear into management expenses. Loans that are sold as a 'benefit' are really no different from the loans everyone can get.

Throughout this article only one healthy male's level-pay WL and T100 \$100,000 policies are analyzed. Of course the numbers would change for different people and options, but none of the conclusions would change. None of the relationships would change.

Adding bells and whistles does not create value – it only personalizes. The industry has decided that its best sales tool is obfuscation.

The author has been told anecdotally that brokers selling these products never use the mortality-adjusted analysis provided in the spreadsheet here, to compare products. That means there are no market forces ensuring that individual bells and whistles are correctly priced. The brokers are selling products depending on the existence of the bells and whistles while ignoring their cost. The laws of commerce guarantee that issuers will misprice those bells and whistles as a result.

## End Note

<sup>1</sup> <http://bridgeforcefinancial.com/supplier-companies/>

<sup>2</sup> Page 21 [http://www.nbbn.ca/jml/nb\\_documents/nb\\_general/product\\_providers/Canada-Life/CL\\_UL\\_Advisor\\_3\\_175398.pdf](http://www.nbbn.ca/jml/nb_documents/nb_general/product_providers/Canada-Life/CL_UL_Advisor_3_175398.pdf)

<sup>3</sup> Page 3 [https://www.sunnet.sunlife.com/files/advisor/english/PDF/Overview\\_of\\_canadian\\_taxation.pdf](https://www.sunnet.sunlife.com/files/advisor/english/PDF/Overview_of_canadian_taxation.pdf)

- <sup>4</sup> [http://www.ci.com/advisingtheclient/sfunds/pdfs/seg\\_sun\\_cred\\_prot.pdf](http://www.ci.com/advisingtheclient/sfunds/pdfs/seg_sun_cred_prot.pdf)
- [http://www.huschblackwell.com/~media/Files/BusinessInsights/BusinessInsights/2011/04/A%20Beneficiary%20Serving%20as%20Trustee%20May%20Affect%20Asse\\_/Files/A%20Beneficiary%20Serving%20as%20Trustee%20May%20Affect%20Asse\\_/FileAttachment/Article\\_BeneficiaryServingasTrustee.pdf](http://www.huschblackwell.com/~media/Files/BusinessInsights/BusinessInsights/2011/04/A%20Beneficiary%20Serving%20as%20Trustee%20May%20Affect%20Asse_/Files/A%20Beneficiary%20Serving%20as%20Trustee%20May%20Affect%20Asse_/FileAttachment/Article_BeneficiaryServingasTrustee.pdf)
- <http://www.advisor.ca/tax/estate-planning/seg-funds-for-estate-planning-advantages-and-pitfalls-203302>
- <http://insuranceconcepts.ca/Limitations%20on%20Creditor%20Protection%20and%20Life%20Insurance.pdf>
- <http://www.riscario.com/creditor-protection>
- [http://www.ci.com/advisingtheclient/sfunds/pdfs/fab\\_creditors\\_e.pdf](http://www.ci.com/advisingtheclient/sfunds/pdfs/fab_creditors_e.pdf)

<sup>5</sup> [https://www.reddit.com/r/PersonalFinanceCanada/comments/5n7ty2/does\\_it\\_make\\_sense\\_to\\_put\\_money\\_away\\_in\\_rrsp\\_if/dcayo1n/](https://www.reddit.com/r/PersonalFinanceCanada/comments/5n7ty2/does_it_make_sense_to_put_money_away_in_rrsp_if/dcayo1n/)

<sup>6</sup> [http://www.investmentexecutive.com/-/making-the-case-for-permanent-life-insurance?redirect=http%3A%2F%2Fwww.investmentexecutive.com%2Fspecial-feature%3Fp\\_p\\_id%3D175\\_INSTANCE\\_TS7iffNVLHa9%26p\\_p\\_lifecycle%3D0%26p\\_p\\_state%3Dnormal%26p\\_p\\_mode%3Dview%26p\\_p\\_col\\_id%3Dcolumn-1%26p\\_p\\_col\\_pos%3D1%26p\\_p\\_col\\_count%3D2](http://www.investmentexecutive.com/-/making-the-case-for-permanent-life-insurance?redirect=http%3A%2F%2Fwww.investmentexecutive.com%2Fspecial-feature%3Fp_p_id%3D175_INSTANCE_TS7iffNVLHa9%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-1%26p_p_col_pos%3D1%26p_p_col_count%3D2)

<sup>7</sup> [http://www.investmentexecutive.com/-/making-the-case-for-permanent-life-insurance?redirect=http%3A%2F%2Fwww.investmentexecutive.com%2Fspecial-feature%3Fp\\_p\\_id%3D175\\_INSTANCE\\_TS7iffNVLHa9%26p\\_p\\_lifecycle%3D0%26p\\_p\\_state%3Dnormal%26p\\_p\\_mode%3Dview%26p\\_p\\_col\\_id%3Dcolumn-1%26p\\_p\\_col\\_pos%3D1%26p\\_p\\_col\\_count%3D2](http://www.investmentexecutive.com/-/making-the-case-for-permanent-life-insurance?redirect=http%3A%2F%2Fwww.investmentexecutive.com%2Fspecial-feature%3Fp_p_id%3D175_INSTANCE_TS7iffNVLHa9%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-1%26p_p_col_pos%3D1%26p_p_col_count%3D2)

<sup>8</sup> <http://www.cia-ica.ca/docs/default-source/2015/215076e.pdf?sfvrsn=0>

<sup>9</sup> <https://www.kitces.com/blog/life-insurance-loan-taxation-rules-at-death-or-lapse/>

<sup>10</sup> [https://en.wikipedia.org/wiki/Cash\\_value](https://en.wikipedia.org/wiki/Cash_value)

<sup>11</sup> Page 16 [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=387321](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=387321)

<sup>12</sup> [http://laws.justice.gc.ca/eng/regulations/c.r.c.,\\_c.\\_945/page-17.html#h-59](http://laws.justice.gc.ca/eng/regulations/c.r.c.,_c._945/page-17.html#h-59)

<sup>13</sup> Page 7 at age 79 if the CSV were available at cancellation the net cancellation value would be positive. <http://www.retailinvestor.org/pdf/redditreader1.pdf>

<sup>14</sup> <http://www.retailinvestor.org/pdf/ManulifePolicyLoanInterest.pdf>

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<sup>15</sup> [https://cdn.equitable.ca/forms/unsecured/insurance/Collateral\\_Loan\\_Program.pdf](https://cdn.equitable.ca/forms/unsecured/insurance/Collateral_Loan_Program.pdf)

<sup>16</sup> [https://repsourcepublic.manulife.com/wps/wcm/connect/d17d68dd-a2ee-44ee-9457-a9b484fc82f0/bnk\\_specialized\\_AB0810.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d17d68dd-a2ee-44ee-9457-a9b484fc82f0-m91A7fe](https://repsourcepublic.manulife.com/wps/wcm/connect/d17d68dd-a2ee-44ee-9457-a9b484fc82f0/bnk_specialized_AB0810.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d17d68dd-a2ee-44ee-9457-a9b484fc82f0-m91A7fe)

<sup>17</sup> <https://www.assante.com/advisors/fmalinka/documents/N-CLU-Disposition%20of%20A%20Life%20Insurance%20Policy%20May%20Jun%2010.pdf>

<sup>18</sup> section G3 (3.) <http://www.retailinvestor.org/pdf/rbcULpolicy.pdf>

<sup>19</sup> [https://repsourcepublic.manulife.com/wps/wcm/connect/d17d68dd-a2ee-44ee-9457-a9b484fc82f0/bnk\\_specialized\\_AB0810.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d17d68dd-a2ee-44ee-9457-a9b484fc82f0-m91A7fe](https://repsourcepublic.manulife.com/wps/wcm/connect/d17d68dd-a2ee-44ee-9457-a9b484fc82f0/bnk_specialized_AB0810.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d17d68dd-a2ee-44ee-9457-a9b484fc82f0-m91A7fe)

<sup>20</sup> [https://repsourcepublic.manulife.com/wps/wcm/connect/d17d68dd-a2ee-44ee-9457-a9b484fc82f0/bnk\\_specialized\\_AB0810.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d17d68dd-a2ee-44ee-9457-a9b484fc82f0-m91A7fe](https://repsourcepublic.manulife.com/wps/wcm/connect/d17d68dd-a2ee-44ee-9457-a9b484fc82f0/bnk_specialized_AB0810.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d17d68dd-a2ee-44ee-9457-a9b484fc82f0-m91A7fe)

<sup>21</sup> Page 7 at age 79 cancellation values cannot cover the debt. <http://www.retailinvestor.org/pdf/redditreader1.pdf>