



## WHOLE LIFE INSURANCE

## How to measure (and not measure) whole life efficiency

How do you compare cars? If you want to drive quickly, you can measure a car's acceleration and its top speed. If you are interested in fuel economy, you can measure miles per gallon in the city and on the highway. If you are interested in safety, there are ratings for that too.

But it gets harder when you try to measure and compare the relative effectiveness of different companies' whole life insurance policies for a specific purpose, like generating cash flow in retirement. There isn't a third-party organization like Consumer Reports or a publication like Car and Driver to critique, compare and rank life insurance policies. While it's a bit easier to measure a policy's efficiency at purchasing death benefit, things get a bit trickier when you're trying to determine its effectiveness at accumulating and distributing cash value. The financial professional is often left to rely on the comparative measures and marketing claims provided by the life insurance company. (Like this piece.) Two of the most commonly touted whole life "quality" measures? The company's current Dividend Interest Rate (DIR) and the internal rate of return (IRR) on cash value. Unfortunately, both can be poor measures of a whole life product's quality.

### Using DIR to Compare: Pretending temporary conditions are permanent

Companies like to tout their current DIR as proof that their policy is better than another. Sometimes, they may even show a short history of rates, perhaps five or ten years, as confirmation that their track record is superior. Tactics like

these often leave a positive impression as to the potential future performance of a policy. But is this a good way to discuss policy differences?

Probably not. Using current DIR can lead to assumptions about performance that may not be well grounded. The first is that a company's current DIR will hold steady for the life of the policy. A second is that a current gap between the respective DIRs of two products reflects a permanent deficiency/advantage between the two.

Let's be realistic: Neither of those assumptions are remotely likely. History shows that every company issuing participating whole life policies has increased and decreased their DIRs to adjust to the environment when needed.

Current DIRs are temporary, driven by today's economic conditions. Remember, dividends originated as a return of "excess" premiums to policyholders, when a carrier's results for expense management, mortality experience, and investment returns were more favorable than what was originally assumed in the traditionally conservative assumptions that go into whole life pricing and design.

While all of the above remains true, for many carriers we are now in a time frame where additional dividend support

may be offered. This creates a situation where a new factor appears, one that has not been part of the historical dividend calculation and it is unknown a) how large a factor it is; and b) whether a carrier will continue this practice for the entire life of the contract. Both of these questions loom large when comparing policies from different carriers. Are we comparing traditional dividend calculations against a new method? Is it reasonable to do so? And if there is a level of dividend support being paid in a given year, will that same level be present in every following year? None of the answers are truly knowable today, which makes DIR comparisons particularly problematic.

Is there a better way to think about DIR on a comparative basis? One possibility is to look at rates over time. Most life insurance projections run for 30, 40 or even 80 years. Looking at DIR in a single year (today) and then using that as the measurement tool over a fifty year time period will have a tendency to magnify short-term differences between investment portfolios or dividend crediting practices. Smoothing out those bumps by looking at longer term averages may present a more useful view.

### A quick DIR case study

The table below shows three company DIR sets over the past thirty years and the average during that time.

|                      | 2020         | 2010         | 2000         | 1990          | DIR Average 1990-2020 |
|----------------------|--------------|--------------|--------------|---------------|-----------------------|
| <b>Ohio National</b> | <b>5.20%</b> | <b>6.40%</b> | <b>8.30%</b> | <b>10.55%</b> | <b>7.38%</b>          |
| New York Life        | 6.00%        | 6.11%        | 7.90%        | 10.25%        | 7.16%                 |
| Penn Mutual          | 6.10%        | 6.34%        | 7.40%        | 9.93%         | 7.22%                 |

It's plain to see that in 2020 Ohio National's DIR is lower than either or the other companies. But if you look at 2010 or 2000 or 1990, Ohio National is now #1. Does that mean the products were better then? No. it means that in those years Ohio National had a higher DIR than either of the other two carriers for some particular reason. It also likely meant that the products projected better than the other two carriers based upon the DIR at that time. But DIR advantages are temporary; they really don't speak to the permanent quality of the policy or the issuing company. What will the next 30 years bring to a client purchasing a policy today? Is it likely that a 90 point spread in DIR between two carriers will be maintained?

Long term, no insurance company has a portfolio of assets that significantly out-performs their peers. Fundamentally, carriers are usually as concerned, or more, about matching assets and liabilities than they are with reaching for investment return. All insurance companies place the bulk of their investable assets in high grade corporate bonds and commercial mortgages. And while there have been periods of time when one carrier or another got a temporary edge, everything typically returned to normal patterns and yields.

Which means every whole life carrier on a long-term basis should have similar DIR rates, irrespective of what they illustrate today. The final column of the table shows exactly that point as the 30-year average takes out spikes and simply compares over the long-term. And isn't that really what we should remember about projections and DIR? That long-term you shouldn't see big differences? And if that's the case, does it make any sense to compare products with widely different DIR today, and actually believe that the resulting comparison holds any value?

### Using IRR to compare: Building policyholder expectations on sand

While whole life illustrations have always outlined the guaranteed and projected cash values of a policy, it was only a few decades ago that supplemental reports entered the scene, with new measures meant to help agents compare products and explain the policy's benefits to their clients. One such measure was the policy's projected death benefit and cash values, relative to the premiums paid, and expressed through an interest-like growth rate — the internal rate of return.

Some IRRs make perfect sense, like calculating the IRR on death benefit. At any given point, it's easy to determine the death benefit's "yield" relative to the premium paid.

However, using IRR calculations on cash value may have an unforeseen pitfall. Yet, cash value IRR is often used as a tool to assess potential policy performance.

The pitfall is this: It is not possible for the policy holder to access all of the cash value inside of a policy without either surrendering the policy or seeing it lapse. While the inner workings of a whole life policy may not be as transparent as a universal life policy, it's important to remember that there are still "deductions" taking place inside of the policy for expenses. What you see in the illustrated cash value is the net result of the policy's inner workings. The guaranteed cash value growth inside of the whole life policy is there to provide support to the policy – not to serve as a side savings account. That's why only Paid-up Additions (PUAs) can be accessed through surrenders (or loans), and the guaranteed cash value is solely accessible via policy loans.

In short – Just because the policyholder sees the cash value in the illustration or an on annual statement doesn't mean the policyholder will be able to spend the cash value. If they want to retain the policy, a significant portion of that cash value has to stay behind to help cover the policy's later expenses, and to cover the interest charges that will accrue on policy loans.

Here's a simple way to explain it: Imagine you have two cars sitting side by side in a parking lot. An illustration tells you that Car A has 18 gallons of gas in the tank, and Car B has 16 gallons. Which car will be able to drive further? Eighteen gallons is better than 16, right?

But you know it's not that simple. The volume of gas in the tank is only one piece of the puzzle. What if Car A is a gas-guzzling SUV with an oil leak, and Car B is a sleek hybrid sedan? Both need gas in the tank to move. But the gas in the tank does nothing until it gets converted by the car's engine into movement.

IRR on cash value only tells you how well the policy's design filled the tank. The same goes for simply trying to compare the amount of cash value in a policy at different ages. Those measures do nothing to tell you how efficiently the policy's design (its engine) converts the cash value into spendable dollars (its mileage).

Additionally, a whole life policy's IRR is inseparably connected to the policy's illustrated DIR. A currently-higher DIR inflates the projected long-term cash value of the policy, driving up the IRR a supplemental report shows the consumer. The longer the time-horizon of the policyholder, the greater the potential disconnect between expectations and reality. Even a slight competitive edge in DIR, when its illustrated effects are compounded over an extended period, can drastically change the estimated cash value the client sees. And if/when the DIR comes down? Compounding works both ways, and the decrease in projected values will be just as dramatic.

While the potential for dividends has been, and always will be, a valuable benefit of participating whole life policies, it's vital to remember that dividends are a non-guaranteed element of the policy, and DIRs are subject to change. Dividends are not the primary benefit offered by a whole life policy. The death benefit is. The more that the success of an illustrated solution is predicated on maintaining the currently-credited DIR, the more vulnerable that concept is to not achieving its desired result. We have been, and continue to be, in a prolonged low-interest rate environment. The impact low interest rates have on DIRs is not a mystery, and should not come as a surprise to any financial professional.

## Is there a better way to measure efficiency?

How then could we think about policies and which ones might be better than others? In that discussion, it's best to start thinking about how a policy is designed. Is it built with low expenses? Does it have features that support the purpose of the product? Is it, in fact, an efficiently designed policy?

Let's say your client, Courtney, wanted to both protect her family in the event of her death and also put some money away to supplement her future retirement. You could run a projection of future values (we sometimes call those illustrations) based upon a current assumed rate of return



and take the final numbers as proof that one policy is better than the other. The numbers might look like the table below.

**Courtney:** Female Age 50, Best Class, \$20,000 Annual Premium, Maximum loan age 66-90 (non-guaranteed, current)

|           | Initial DB | CV @ 65   | Cash Flow 66-90 | CV @ 90  |
|-----------|------------|-----------|-----------------|----------|
| Company A | \$554,723  | \$328,497 | \$23,453        | \$32,754 |
| Company B | \$662,033  | \$372,666 | \$23,200        | \$42,116 |

From the discussion above we know that some carriers have higher current DIRs than other, and that's going to drive higher cash value, IRR and income projections. In fact, in the example above Company B projects at a DIR that is 90 basis points higher than Company A. Therefore we should expect more cash value at age 65 for a policy with a higher DIR. We also know that the 90 point differential is unlikely to continue for the forty years that we are considering in the above example. Looking at cash value then, may not be the best way to think about how well the product delivers for our client.

Did you notice that Company A is able to distribute roughly the same amount of money as Company B. despite having considerably lower cash value at 65? Perhaps there's something in that bit of information that gives us a clue about the policies' relative efficiency. After all, if a carrier can distribute more with less, and is projecting at a significantly lower DIR, then it would make sense that this would be true in many DIR scenarios. And if that's the case, maybe there's something to the design of the policy that allows this to happen.

In fact, the policy represented by Company A is Ohio National's Prestige Max policy. This policy has several design features that make it attractive from both a protection (and importantly to Courtney) a distribution perspective. First, the policy is payable only through age 65, so that once it is time to distribute cash value, there are no ongoing premium payments to reduce the distributions.

Second, the policy comes with a preferred loan feature. The preferred loan allows the policy holder to borrow from a Prestige Max at a reduced loan rate once the policy becomes paid up (at age 65). With a reduced cost of borrowing, more money can be distributed to the policyholder.

Third, the Prestige Max endows at age 100. This has a couple of effects. One, the guaranteed cash in the policy grows a bit more rapidly as it must be equal to the death benefit at age 100 (as opposed to age 121). Endowment at 100 also allows for higher dividends post age 100. These higher dividends can help keep the policy in force even with large loan balances.

So why does Prestige Max generate similar cash flow with less cash? It's simple: efficient design makes a difference. In fact, it can be the most important element for the product. Prestige Max has features and benefits that are contractually guaranteed that help a client pull out more of their cash value. The design is the product. And the design drives efficiency in distribution.

## Distribution Efficiency Measurement

It's time to think about a new concept, the Distribution Efficiency Measurement, or "DEM". This is an attempt to determine how well a policy operates as a distribution tool for a policy holder. To generate DEM you only need to know two pieces of information; the total distribution amount and the gross cash value of the policy in the last year of the distribution (assuming all loans as a distribution method).

When using withdrawal to basis and then loans for distribution, then gross cash value should be measured using a projection that does not show distributions. If you use the

Competitive information obtained from company software believed to be accurate as of 4/1/2020. Premiums, cash values and cash flows based on the respective carriers' current loan and dividend interest rates.

Life insurance cash values grow without being subject to current taxation. Cash values can be accessed by way of policy loans without being subject to taxation. However, if tax-free loans are taken and the policy lapses, a taxable event may occur. Loans and withdrawals from life insurance policies classified as modified endowment contracts may be subject to tax at the time the loan or withdrawal is taken and, if taken prior to age 59½, a 10% federal tax

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gross cash value after taking withdrawals you are showing less cash than the policy actually produces.

Once you have the total distribution (A) and the gross cash value (B), simply divide A by B and you will know what percent of the ultimate cash value actually got distributed to your customer. This is the DEM. The higher the ratio, the more efficient the contract. The more efficient the contract, the more likely it will perform the way you and your client expect irrespective of what the policy is projecting today.

If we go back to our customer Courtney, we get the following for DEM calculations:

|           | Total Income Received | Gross CV @ 90 | Efficiency Measure |
|-----------|-----------------------|---------------|--------------------|
| Company A | \$586,325             | \$980,875     | 59.78%             |
| Company B | \$580,000             | 1,394,974     | 41.58%             |

Following the logic above, we now know that Prestige Max (Company A) has a much higher DEM than Company B. Over the ensuing forty years that Courtney owns her policy it is likely that irrespective of the interest rate environment, she will have more cash flow from a policy with a higher DEM than one with a lower DEM.

## Measuring efficiency matters

Why is the efficiency measure important? Because the dividend interest rates upon which we project cash values will go up and they will go down over time. The company with a higher rate today may one day be below the other. Fundamentally, all carriers invest in much the same assets: investment grade corporate bonds and commercial mortgages. For periods of time, one or another may be higher but that period of success has historically been temporary. What won't change is how the contract is built – because it's a contract, it can't change. And therefore, product design becomes more important to the end result than most people believe. Simply put, the more efficient your client's policy, the more effective it will be over time at accomplishing the goals that your clients wants to achieve.

penalty may apply. Withdrawals and loans reduce the death benefit and cash surrender value.

Whole life insurance is issued by The Ohio National Life Insurance Company. Prestige Max is a variation of the marketing name for Prestige Max III, issued as Policy Forms 06-PW-1/1U 07-PTD-1 and any state variations. Guarantees are based on the claims-paying ability of the issuer. Dividends are not guaranteed. Products, product features, and rider availability vary by state. The issuer is not licensed to conduct business in New York.



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