

The relationship between pricing assumptions and dividends



Participating life insurance has basic guaranteed values

Participating life insurance includes basic guarantees. It's guaranteed to stay in force for a client's lifetime, if they make the guaranteed basic premium payments. Guaranteed coverage and cash value built up inside a policy can't be reduced or used in any way, unless the policyowner asks us to use those values, or as details of the policy allow. Even if interest rates remain at historically low levels, a policy's guaranteed cash value will continue to grow.

Pricing assumptions

Long-term assumptions on interest rates, insurance claims (mortality), expenses (including taxes) and other factors are used in pricing participating life insurance products. These pricing assumptions are used to determine the basic guaranteed elements of a participating policy.

Dividends

Participating policyowner dividends arise when the actual experience of the participating account (the combination of investment returns, insurance claims (mortality), expenses, and other factors) are collectively more favourable than the assumptions used when the life insurance policy was priced. This creates earnings within the participating account that may be available to be distributed to policyowners as dividends. In other words, when the experience in the participating account is more favourable than what is required to cover policy guarantees, dividends may be distributed.

The dividend scale interest rate (DSIR) is used in calculating the investment component of the dividend. In simplified terms, the investment component of the dividend is based on the difference (or spread) between actual experience and the assumptions made when pricing the product. The DSIR incorporates the smoothed investment experience on assets in the participating account backing the liabilities, for the most recent measurement period.

The DSIR isn't the dividend, or the dividend rate. It's only one factor that contributes to an individual policy's total dividend.

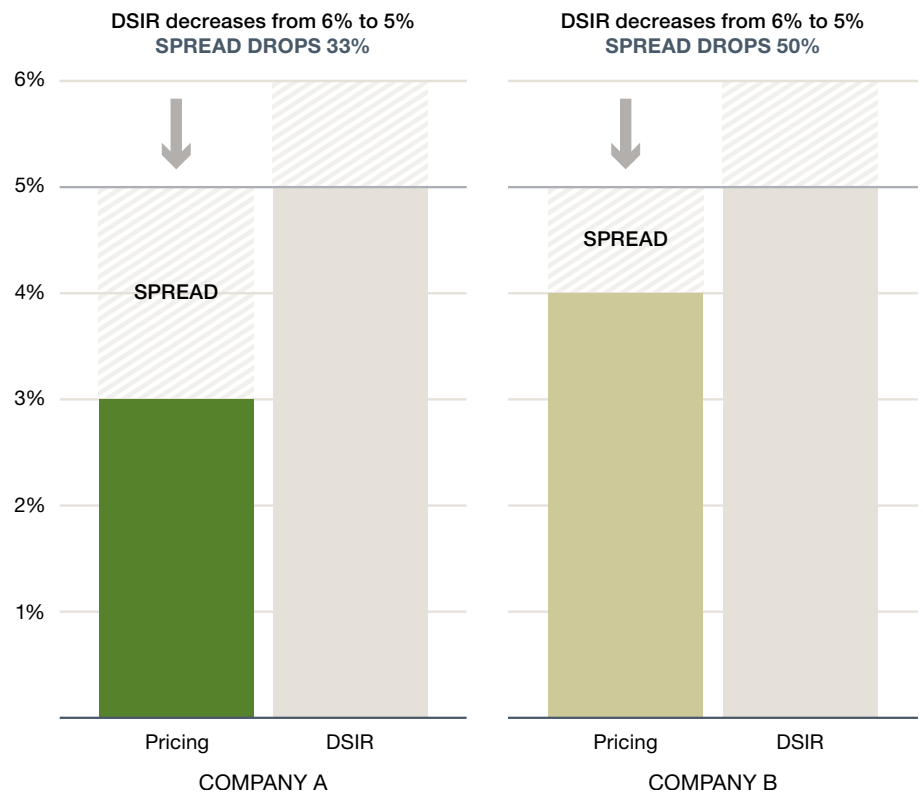
[See why this matters >>>](#)

Why does this matter?

Let's assume a hypothetical example where the DSIRs for two companies (A and B) are both set at 6%, but each company's products used different pricing interest rates (assumptions).

Company A – assumes a 3% pricing interest rate. This creates a spread of 3% (DSIR – pricing interest rate) which is used to calculate the investment component of the dividend.

Company B – assumes a 4% pricing interest rate, creating a spread of 2% used to calculate the investment component of the dividend.



If DSIR goes up, there's the potential to get more dividends from the investment component since there will be a larger spread.

What are some of the important effects of using a less-conservative pricing assumption?

I. As the DSIR decreases, products that used a higher pricing interest assumption will see larger percentage decreases.

To see why, let's assume the following year, both companies decrease their dividend scale interest rate to 5%.

Company A will see the spread drop from 3% to 2% – a 33% decrease.

Company B on the other hand will see a 50% decline in the spread – from 2% to 1%.

II. Likelihood of zero dividends

Products that used less conservative pricing assumptions, such as a higher pricing interest assumption, are more likely to have dividends of zero when the DSIR decreases, all else being equal.

III. Premium offset

Dividend values are used to support premium offset. For this reason, less conservative pricing assumptions, which tend to result in lower dividends, will result in more sensitive premium offset dates.

IV. Enhancement maximums

The maximum Enhancement a policy can have is based on the amount of Enhancement future dividends can support. If dividends are lower, the amount of Enhancement a policyowner can add may also be lower.