Tax reform – Disability income and group life

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The Tax Cuts and Jobs Act of 2017 (TCJA) was signed into law in December 2017, and included numerous changes affecting various parts of the economy. In this paper, we dig deeper into the projected effects on disability income and group life insurance profitability. In order to understand the possible impact of TCJA on our products, we prepared an analysis to measure the impact on an illustrative plan of each of the following types:

- Individual disability income (IDI)
- Group long-term disability income (GLTD)
- Group short-term disability income (GSTD)
- Group life insurance with waiver of premium (Life)

The actual impact of TCJA will vary with the facts and circumstances of the case at hand, including the product design and the tax situation of the company. However, we can still gain value from looking at some illustrative cases.

For this purpose, we considered three key changes in the tax law affecting life insurers as well as a fourth change, which remains an open issue:

1. An extension of the proxy deferred acquisition cost (DAC) tax amortization period from 10 years to 15 years and an increase in the proxy DAC tax rate—from 7.7% to 9.2% for individual disability income and from 2.05% to 2.45% for group life.
2. A change in the way the tax reserves are calculated via the application of a 92.81% scalar multiple to statutory reserves.
3. Reduction in the federal income tax rate from 35% to 21%.
4. The risk-based capital (RBC) factors were increased by a scalar multiple of 1.22 (i.e., (1 - 0.21)/(1 - 0.35)) to reflect the lower tax rate. We present this as a separate step because, as of this writing, the National Association of Insurance Commissioners (NAIC) has not provided final guidance. This seems unlikely to happen to most life products, but as you will see in the discussion below, it is still undetermined for disability products.

Of these factors, the tax rate change will tend to increase after-tax profits, while the other factors will generally decrease after-tax profits. For most of our illustrative product types, the tax rate change modestly outweighs the other changes, though the impact varies with product.

One other change in the tax law that deserves mentioning is the new base erosion and anti-abuse tax (BEAT). This change will affect any insurance company that reinsures business to off-shore affiliates that are not U.S. taxpayers. It essentially equates to 5% of gross premium and net investment income in 2018, increasing to 10% from 2019 through 2025 and then 12.5% thereafter. This change is not included in our modeling because the impact is highly company-specific and directly dependent on the amount of business that is reinsured to offshore affiliates.

The proxy DAC tax in our model is calculated as a specified percentage of premium, which is added to taxable income in each year. That amount is then amortized back out of income over the next several years. For the products we are considering in this article, this tax only applies to group life and individual disability income insurance. Before TCJA, the specified percentage of premium was 7.7% for individual disability income and 2.05% for group life. After TCJA, the values are increased to 9.2% and 2.45%, respectively. In addition, the amortization period has been increased from 10 years to 15 years.

The tax reserve methodology for all products has also changed under the new tax law. Previously, the tax reserve was calculated using statutory morbidity rates and the greater of the applicable federal interest rate (AFIR) and the prevailing maximum statutory valuation rate for the contract's year of issue. For the last several years, the AFIR has been lower than the statutory valuation rate, resulting in tax and statutory reserves being equal. TCJA has changed the calculation of tax reserves for all the products discussed in this article, making it equal to 92.81% of the statutory reserves. This has the impact of further raising the taxable income that a product generates.

The interpretation of the new tax reserve methodology varies among different carriers. Some carriers are interpreting it to mean that all tax reserves are calculated at 92.81% of statutory reserves. Others anticipate only applying the factor to reserves shown on Exhibit 6 of the annual statement, while using the full statutory reserves for the purpose of calculating taxable income for Exhibit 8 reserves of accrued liabilities. For this analysis, we applied the 92.81% factor when calculating all tax reserves.

The new tax law also features a reduction in the federal corporate income tax rate from 35% to 21%. This is applied to taxable income after the other changes, discussed above, that increase the taxable income, making the overall effect much less dramatic. This change will also not be as favorable as it seems for blocks of business that are performing with little or no profit.

RBC company action level is the minimum amount of capital that an entity should hold to support its risk. Companies usually hold a multiple of the RBC company action level. In our model, we are assuming that our company is holding 350% of RBC company action level for these illustrations. The 2017 RBC calculation of the company action level for life insurance companies reduced many of the factors in the RBC calculation to 0.65 (i.e., 1 - 0.35) to "tax-effect" the factors. To test the strict impact of the decrease in the tax rate on life insurance companies' RBCs, we have modeled a change in the "tax-effect" factor to 0.79 (i.e., 1 - 0.21), which results in all RBC factors being increased by approximately 22%. As of this writing, the NAIC's Life Risk Based Capital Working Group has made a similar proposal, which has been met with concern from the industry. The general thought is that the reduction in the corporate tax rate does not increase the inherent risk in a business and should not drive an increase in their required surplus. The American Council of Life Insurers has included this statement in the preface to their comment letter (dated June 5, 2018):

> *"The changes being proposed in this Exposure Draft are going to have a significant impact on the RBC requirements for life insurance companies. RBC ratios will drop for all life insurers as capital requirements, which are measured against existing capital, are increasing. We estimate the increase in required capital will generally be between 10% and 15% for most companies, and even more for some companies, depending upon the product mix of the company. As a result, RBC ratios will decrease significantly for all life insurers. It is imperative that both regulators and other stakeholders not draw the wrong conclusions from this steep and sudden drop in RBC ratios across the industry."*

In April 2018, the Life Risk Based Capital Working Group deferred changing the long-term care (LTC) or disability income (DI) factors because a change would have created an inconsistency with the way those products' RBC factors are calculated for health companies. We are still awaiting final guidance on this topic, which could have a significant impact on the expected profitability of our products.

For the purpose of these comparisons, we are considering the impact of two common post-tax profit measures. The first is the internal rate of return (IRR). This is calculated as the rate of interest that results in the present value of distributable profits equaling zero. The second calculation is the profit margin. This is calculated as the present value of distributable profits at 4% divided by the present value of premiums at 4%. In both cases, distributable profit is defined as the free cash flows from the product after taxes and after capital changes. Investment income for all products is set to 4%.

The table in Figure 1 shows a summary of illustrative TCJA impacts to IRR and profit margin for IDI, GLTD, STD, and group life products, assuming no change in product design, pricing, or premium levels.

FIGURE 1: SUMMARY OF ILLUSTRATIVE TAX REFORM PROFITABILITY IMPACTS AFTER-TAX AND COST OF CAPITAL

	BEFORE TAX REFORM		AFTER TAX REFORM	
	IRR	PROFIT MARGIN	IRR	PROFIT MARGIN
IDI	10.8%	11.4%	10.5%	12.6%
GLTD	14.0%	8.8%	14.1%	11.1%
STD	19.9%	1.8%	20.5%	2.3%
Life	12.5%	6.4%	13.0%	8.1%

In the following sections, we provide stepwise detail on each illustrative example.

Individual disability income

Our illustrative IDI product is a profitable noncancellable product offering benefits to age 67 based on the incidence and termination rates in the 2013 Individual Disability Income table. It is priced to a 50% loss ratio with average expenses and a high/low commission scale.

The table in Figure 2 shows the impact on after-tax, after-cost-of-capital, profits by step as the tax code changes are layered on.

FIGURE 2: IDI COMPOSITE PROFIT RESULTS

	IRR	PROFIT MARGIN
Before tax reform	10.77%	11.45%
Change DAC tax	10.71%	11.40%
Change tax reserves	10.53%	11.25%
Change tax rate	11.32%	12.53%
Change RBC	10.45%	12.63%

Without the changes to the RBC formula, IDI IRR is up 0.55% and profit margin is up 1.08%. As expected, the change to the tax rate has the largest positive change, while the changes to the DAC tax and the tax reserves partially offset those changes. If the RBC change is also considered, the IRR would be down 0.32% overall and premiums would need to be increased by 1% to bring the IRR back up to the same level. This change would also increase the profit margin to 13.10%.

As will be shown for all of our products, the increase in RBC leaves the profit margin essentially unchanged; however, there are small changes due to the timing of cash flows and the discount of results. RBC changes do, however, have a significant impact on IRRs, where the large impact on cash flows in the first year lowers the IRR.

Group long-term disability

Our GLTD product is priced to a 65% loss ratio with average expenses. The table in Figure 3 shows the impact of various aspects of TCJA.

FIGURE 3: GLTD COMPOSITE PROFIT RESULTS

	IRR	PROFIT MARGIN
Before tax reform	13.98%	8.76%
Change DAC tax	13.98%	8.76%
Change tax reserves	12.48%	8.23%
Change tax rate	16.43%	11.26%
Change RBC	14.06%	11.09%

Both measures show positive overall changes due to the lower tax rate, but to different degrees. The IRR is up only 0.08%, while the profit margin is up 2.33%.

If we do not consider the RBC change, the IRR is up 2.45% and the profit margin is up 2.50%. Proxy DAC tax is not required on GLTD, so the only negative change is the tax reserve. Because this product was profitable to begin with, the tax rate change was very beneficial. If the starting profitability were lower, the impact of this change would not have been as high and could have been outweighed by the impact of the tax reserve.

Group short-term disability

Our GSTD product is priced to a 70% loss ratio with average industry expenses. The table in Figure 4 shows the impact of various aspects of TCJA.

FIGURE 4: GSTD COMPOSITE PROFIT RESULTS

	IRR	PROFIT MARGIN
Before tax reform	19.87%	1.79%
Change DAC tax	19.87%	1.79%
Change tax reserves	19.74%	1.79%
Change tax rate	24.14%	2.27%
Change RBC	20.54%	2.25%

Both measures show a small positive change due to the tax rate, but to slightly different degrees. The IRR is up 0.67%, while the profit margin is up 0.46%.

If we do not consider the RBC change, the IRR is up 4.27% and the profit margin is up 0.48%. Proxy DAC tax is not required on GSTD either, so the only negative change is the tax reserve.

Because the amount of required capital on GSTD is the lowest of all the products modeled here, IRRs appear very high, when in reality the profit margins are rather low on this product across the industry.

Group life

Our group life product is priced to a 70% loss ratio with average industry expenses. It also includes a waiver of premium provision. The table in Figure 5 shows the impact of various aspects of TCJA.

FIGURE 5: GROUP LIFE COMPOSITE PROFIT RESULTS

	IRR	PROFIT MARGIN
Before tax reform	12.49%	6.35%
Change DAC tax	12.27%	6.26%
Change tax reserves	12.08%	6.19%
Change tax rate	14.70%	8.23%
Change RBC	12.96%	8.12%

Both measures show a small positive change due to the lower tax rate. The IRR is up 0.47%, while the profit margin is up 1.77%.

If we do not consider the RBC change, the IRR is up 2.21% and the profit margin is up 1.88%. Group life profitability is reduced by the increase in the proxy DAC tax. There is also a negative impact from the change in the tax reserves. Because this product was assumed to be relatively profitable, the tax rate change was very beneficial. If the starting profitability were lower, the impact of this change would not have been as high and could have been outweighed by the impact of the tax reserve.

Conclusion

The overall impact of TCJA is modest, but positive, for most of these illustrative product types. The illustrative IDI product is the exception where there is a small drop in IRR. While the benefit of a lower corporate tax rate is significant, this is largely offset by the RBC, DAC tax, and tax reserve changes in our model. However, the actual changes to RBC are still unknown and could be somewhat less than we are modeling. In addition, this analysis was done with industry average assumptions on profitable plan designs. Actual results will vary based on a company's individual circumstances, and a company-specific analysis is therefore essential.

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