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GAAP Accounting for FIAs When Living Benefits Are Present

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Fixed indexed annuity (FIA) financial reporting can be challenging, as it deviates from traditional liability views. This article will go over the basics of GAAP accounting for FIAs with riders addressing how rider charges should be considered when determining fair value and how this might translate over to SOP 03-1 and Market Risk Benefits (MRBs) when ASU 2018-12 becomes effective.

FIAs can be considered a fixed annuity (FA) with an equity "kicker," linking account accumulation to the performance of an index like the S&P 500. Increasingly, FIA writers have been attaching riders to these products—the majority being living benefit riders with an associated contractual "fee." FIAs are spread products, so money is not exchanged between the company and the policyholder except premium and decrements. Value is accrued, including any revenue associated with rider fees.

FIAs fall under ASC 815 (FAS 133) and ASC 820 (FAS 157). ASC 815 identifies derivatives, both stand-alone and embedded in a nonderivative contract, and in some cases requires them to be held at fair value. An embedded derivative (ED) needs to be bifurcated from its host (nonderivative) contract and held at fair value, with changes in fair value going through earnings. Once the ED is separated from the host, the host is accounted for under the same GAAP rules as a policy that does not contain an embedded derivative (ASC 815-15-25-24). ASC 820 gives guidance on how to determine fair value where fair value is an exit price and not a reserve although, depending on the liability, it might look a lot like a reserve.

The GAAP balance sheet for an FIA is very similar to that for an FA. Although FIAs include a split between host and embedded derivative, the total FIA liability can be viewed as a traditional FA account value, with a fair value adjustment indicating the options are worth more or less than when purchased, like a parenthetical view described in ASC 815-15-45-1.

Look at the liability from a simple lens and agree with its value before complicating it. In fact, ASC 815-15-30-4 cautions that artificial terms shouldn't be created "to introduce leverage, asymmetry, or some other risk exposure not already present in the hybrid instrument." Taking the most granular view produces consistent results across frameworks, and terms that would skew the value without explanation should not be included.

Since FAs and FIAs are subject to standard nonforfeiture law (SNFL), they can be broken down between SNFL and credited interest above SNFL. In Table 1, SNFL terms are 87.5 percent of premium growing at 1 percent. Assuming no decrements and assuming the discount rate is the same as the credited rate, the policy can be split between a guaranteed amount and an amount at the company's discretion. Host plus Excess (XS) at each period equals the account value, and the cost of funds (COF) is identical to interest credited on a regular FA. Host accretion rate (HAR) is the rate at which host will accrue each period, which is equal to the growth rate and discount rate in this example.

Table 1
Traditional FA Broken Down Into Elements

Year	Av	Guaranteed	Excess Credits	Host	Excess	COF		
0	**100,000**	87,500		**79,290**	**20,710**	Host	Excess	Total
1	102,000	88,375	13,625	80,876	21,124	1,586	414	2,000
2	104,040	89,259	14,781	82,494	21,546	1,618	422	2,040
…								…
10	121,899	96,654	25,245	96,654	25,245	1,895	495	2,390
	HAR	2.00%						

Table 2
Breakdown With Decrements

							Discount		Expected At Issue				
Year	AV	Guaranteed Value	Excess Credits	Lives	Mortality	Lapse	Host	ED	Host	Excess	COF		
											Host	Excess	Total
0	100,000	87,500		1.00000			1.00000	1.00000	80,930	19,070			
1	102,000	88,375	13,625	0.94953	0.0005	5%	0.98039	0.98039	78,088	18,763	1,619	381	2,000
2	104,040	89,259	14,781	0.90115	0.0010	5%	0.96117	0.96117	75,332	18,424	1,562	375	1,937
…													…
10	121,899	96,654	25,245	-	0.0050	100%	0.82035	0.82035	-	-	1,168	305	1,473
	HAR	2.00%											

Premium received by the policyholder represents a $79,290 investment in guarantees and a $20,710 investment in potential excess crediting. Decrements, as demonstrated in Table 2, will shift value between the initial host and excess investment, but initial host balance accrues at the same rate of 2 percent.

ASC 820 asks for a projection in order to arrive at an account "value" and not a projection of account value, which is different from deferred acquisition costs (DAC) and SOP 03-1, which use a projection of account value to get revenue and benefit streams over the life of the contract. The projection of account value is needed to estimate the revenue patterns and the claims patterns. Similarly, ASC 820 for a variable annuity contract with a guaranteed minimum withdrawal benefit (GMWB) would need a projection of account value in order to get the fee streams expected to support the claim stream. If the index credit fair value is treated as a projection of account value rather than a projection to establish today's value, there might be something in the calculation that should not impact today's value at all. Partial withdrawals, for example, shouldn't be introduced because they don't lead to claims above guarantees since the SNFL is reduced dollar for dollar with the account value. Although partial withdrawals affect future index credits, this has nothing to do with today's fair value. Keep in mind that the host rate and host balance represent the expense of the guarantees in the contract, so if a company is changing that from one policyholder to another, it's important to understand why.

In the undecremented projection, if the guaranteed account value and account value are reduced by a 10 percent free partial withdrawal every year, the initial host investment would be $82,564 and the initial excess investment would be $17,436. However, the host would "accrue" to a low ultimate value of $22,184, resulting in a negative host accretion rate (-12.32 percent). This makes very little sense. Even with a less extreme 1 percent partial withdrawal per year, the host accrual rate is 0.73 percent.

Unless units (lives) are impacted, risk may be introduced that doesn't exist in the hybrid instrument. If partial withdrawals are reducing guaranteed value proportionally and, hence, generating excess index credits, risks may be introduced that don't exist in the hybrid instrument. This is not to necessarily say it is incorrect to do so; just understand its impact at this very basic level before adding the calculation complexities that mask these dynamics.

What about GMWB riders and fees associated with them? Recall, there is no other exchange of money except on surrender, and the accounting should also reflect that. If rider fees are being booked explicitly to a revenue account, there should be an offsetting benefit transaction. Going back to a fixed annuity where the liability is very simple to understand, the accounting for a $950 rider fee (with debits and credits) would be as follows:

Income Statement:	
CR Rider Fees	($950)
DR Benefit Withdrawal	$950
CR Change in Reserve	($950)
Balance Sheet:	
DR Change in Reserve	$950

Figure 1
Cost of Funds With and Without Fees Projected

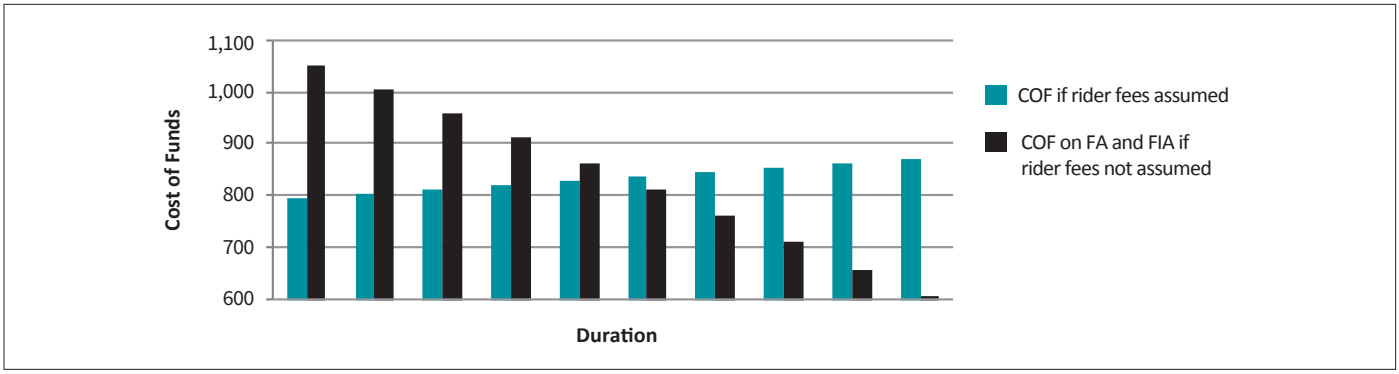

Table 3
Rider Fees in the Value Equation

						Values over time						
Year	GMWB Base	AV	Guarantee	Excess	Rider Fees	Host	Excess	Rider Fees	GAAP Reserve	GAAP - AV	COF Realized	COF Expected
0	100,000	100,000	87,500			79,290	9,586	11,124	100,000	-		
1	107,000	101,050	88,375	12,675	950	80,876	9,777	10,396	101,050	-	1,050	1,050
2	114,000	102,055	89,259	12,796	1,986	82,494	9,973	9,588	102,055	-	1,005	1,005
3	121,000	103,013	90,151	12,861	3,108	84,144	10,172	8,697	103,013	-	958	958
4	128,000	103,923	91,053	12,870	4,320	85,826	10,376	7,721	103,923	-	911	911
5	135,000	104,786	91,963	12,822	5,622	87,543	10,583	6,659	104,786	-	862	862
6	142,000	105,599	92,883	12,716	7,017	89,294	10,795	5,510	105,599	-	813	813
7	149,000	106,362	93,812	12,550	8,507	91,080	11,011	4,271	106,362	-	763	763
8	156,000	107,074	94,750	12,324	10,092	92,901	11,231	2,941	107,074	-	712	712
9	163,000	107,733	95,697	12,036	11,776	94,759	11,456	1,518	107,733	-	659	659
10	200,000	108,339	96,654	11,685	13,560	96,654	11,685	-	108,339	-	606	606
		HAR	2.00%									

Table 4
Varying Discount Curves

	At Issue			Actual Liability									
Year	AV	Guar-antee	Excess over Gtee	Ac-count Value	Host	Excess	Total	Actual COF by Source				Change In Fair Value	XS IRR
								Host	XS	Rider Fees	Total		
0	100,000	87,500		100,000	81,115	18,885	100,000						2.12%
1	102,000	88,375	13,625	101,050	82,413	18,462	100,875	1,598	402	(950)	1,050	(175)	2.25%
2	104,040	89,259	14,781	102,055	83,756	18,193	101,949	1,624	397	(1,017)	1,005	70	2.21%
…													
10	121,899	96,654	25,245	108,339	96,654	11,685	108,339	1,868	287	(1,549)	606	(27)	0%
	HAR	1.97%										(0)	

It is the author's opinion that ASC815/ASC820 is the same regardless of the riders attached to the policy. The features associated with those riders will always be captured within the framework intended ...

The company is just earning additional spread and not "charging" a fee, so it comes through as lower net COF. For example, in year 1, premium of $100,000 earns $2,000 in index credits and then $950 is "paid" in fees, leading to a net COF of $1,050.

Historically, rider fee treatment has been a concern since it could impact surplus. This is because there is no reserve release for rider fees since fair value calculations are prospective, but the fair value calculation is not a reserve, so it doesn't need to release anything. The calculation is prospective based on today's account value, and anything reflected in today's account value will also be reflected in today's account "value." The liability will release them unless the calculation takes credit for something today not yet received. Using the simplified host and XS split with consistent economics and no decrements, cost of funds should not be any different from a fixed annuity but, depending on how fees are treated, cost of funds may be impacted in unintended ways. Figure 1 (pg. 12) shows there is a different pattern of net COF depending on whether fees are projected.

HAR is reduced since value of the excess has dropped and the initial investment in the host has increased. The guaranteed value is unchanged since SNFL isn't reduced for rider fees. This means a policyholder has to invest more to get the same guarantee at the end of 10 years by adding the rider. The liability at time 1 should equal the account value given the economics are the same between host and excess. However, by reducing the account value projection for fees, the calculation is fronting the rider fees, taking credit today for something to be received in the future. Interest credits aren't realized in the future because value shifted to the company, not because they didn't have as much value. That value should be tracked for the math to work as shown in Table 3 (pg. 12).

The solution is to ignore rider fees in the projection, and rider fees will be captured in the starting account value. This is supported by ASC 815-15-25-10 when an embedded derivative (GMWB being a put option against the company) is clearly and closely related to the host contract and, therefore, doesn't require bifurcation.

Under this logic, if a policyholder were to drop the rider, there would be a large increase in COF to "pay back" the rider fees the company took credit for at inception due to the large decrease in the ED. This shouldn't happen since the only relief to the company should be a lower SOP reserve accrual, which is the framework that accounts for the rider risk (or MRB release under ASU 2018-12). When rider fees are ignored, it makes no difference if the rider is dropped as expected, even when decrements are layered on.

Once all the appropriate decrements are in the calculation, the complexity can be layered on. Assume the risk-free rate is 3 percent in the first year and 2 percent thereafter. As can be seen in Table 4 (pg. 12), now the XS portion has a higher IRR (2.12 percent), which decreases the initial XS investment and increases the initial host investment, accruing at a slightly lower rate.

At the end of year 1, there's a negative fair value adjustment because the XS IRR increases to 2.25 percent due to the yield curve shift.

As shown, there is no surplus problem since the liability will always be released for rider fees. DAC, SOP 03-1 and, eventually, MRBs are attempting to value completely different things and should be considered separately. The index credit fair value is a projection to arrive at the current base contract liability value, or an exit price should the policyholder terminate the agreement. DAC, SOP 03-1 and MRBs take this starting account value and project how it changes over time, as it impacts revenue, expenses and rider claims the same way a fixed annuity or variable annuity account value is the starting point in those calculations.

CONCLUSION

It is the author's opinion that ASC815/ASC820 is the same regardless of the riders attached to the policy. The features associated with those riders will always be captured within the framework intended, and if those features are not deemed an embedded derivative that must be bifurcated from the host, they should be ignored in the embedded derivative calculation. In doing so, the balance sheet and income statement are in alignment. For more detailed information regarding this treatment and the stacking of fair value elements, please feel free to reach out to the author. ■

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