

ALM Derivative SSAP Proposal

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Overview

- Consistent with industry's November 2024 comment letter, an ALM derivatives SSAP proposal is being submitted for your consideration
- As noted in last year's comment letter, ALM derivatives (a.k.a. asset liability management derivatives or duration derivatives) protect surplus by shielding insurance companies from negative impacts of interest rate changes
 - This preserves insurance company solvency and ensures policyowner benefits can be fulfilled (thereby benefitting policy holders, insurance companies, and regulators)
- Ultimately, this proposal will:
 - Significantly enhance the alignment of each company's reported surplus with its actual solvency and liquidation value; and
 - Avoid situations where financials contain inappropriate portrayals of surplus and illusory financial strength



Background

- ALM derivatives are hedging instruments (a specified derivative or a portfolio of specified derivatives) that hedge the duration difference of the designated asset and liability portfolios
- Common duration measures include:
 - Modified Duration is the effect that a 100-basis-point (1%) change in interest rates will have on the price of an instrument (e.g., if an instrument has a modified duration of 5, a 1% change in interest rates would be expected to cause a 5% change in the instrument's price in the opposite direction)
 - Macaulay Duration is the weighted average time until cash flows are received and is measured in years
 - <u>DV01</u> measures the dollar change in an instrument's price for a one basis point (0.01%) change in rates



Background (continued)

- Entities hedge the duration difference between assets and liabilities to eliminate deficits in liquidation value and preserve surplus
 - For example:
 - BOP Fixed Income Assets = \$100 (Modified Duration = 9)
 - BOP Hedged Liabilities = \$100 (Modified Duration = 10)
 - o BOP Fixed Income Assets & Liabilities' amortized cost = fair value
 - o BOP ALM Derivatives amortized cost & fair value = 0

Liquidation Value (amounts rounded for simplicity)								
Liquidation Value (fair value realization via asset sales, derivative settlement, reinsurance):								
	Assets	Liabilities						
BOP Fair Value (Liquidation Value)	100	100	Net Flat Liquidation Value					
Value Change (ex-derivatives)	9	10	Interest rates decrease 1%					
EOP Fair Value (Liquidation Value) (ex-derivatives)	109	110	Net Liquidation Value changes due to duration difference (pre-hedging); also, bond reinvestment interest rates may not cover liabilities					
ALM Derivatives	1		ALM derivatives (e.g., receive-fixed swaps in this scenario) will increase in value when rates fall (which offsets the above difference)					
EOP Liquidation Value (w/derivatives)	110		BOP net flat Liquidation Value remains intact due to highly effective hedges					

Note: While the above duration difference can be filled with longer term/duration bonds, longer term bonds that match typical product liabilities (e.g., 30+ years) are limited in supply in the market



Background (continued)

- Asset and liability durations evolve over time with product sales, benefit payments, asset maturities, etc.
- Also, durations can also grow further apart due to convexity (change in duration as interest rates change); for example:
 - An asset or liability has a modified duration of 5
 - If interest rates increase by 1%, the asset/liability price (fair value) is expected to decrease by approximately 5% (based on duration)
 - However (particularly for larger interest rate fluctuations) due to convexity, the actual price change might be slightly more or less than 5% (as the price/rate relationship isn't always perfectly linear for larger rate changes)
- Because of the above, hedging strategies need to be dynamic and cannot always be solved by buying and selling investments due to availability, tax costs, bid/ask spreads, etc.



Background (continued)

- Due to its importance around surplus preservation, ALM derivatives and duration hedging are common in the industry but often don't qualify for hedge accounting under SSAP86 or 108 (as those SSAP's parameters are different from duration constructs)
- The above results in many derivatives being marked-to-market in surplus, which (for highly effective duration hedges of amortized cost assets/liabilities) results in reported surplus that is not aligned with economics/liquidation value; i.e.
 - Surplus is inappropriately inflated from MTM derivatives in declining interest rate environments
 - Surplus is inappropriately deflated from MTM derivatives in increasing interest rate environments
- Also, an anomaly currently exists with IMR for terminated derivatives (per the INT for companies that had taken deferred gains to IMR historically) in that a derivative unrealized loss (negative to surplus) can be turned into an asset (positive surplus) and vice versa at the timing discretion of the insurance entity via derivative termination
- The above issues are essentially eliminated with the proposal on the subsequent slides



Proposals

- Two versions of this SSAP draft proposal are being submitted:
 - Amortized Cost Method favored by industry due to the following:
 - Minimizes operational complexity
 - More closely aligned to the hedged items (i.e., assets often recorded at amortized cost and liabilities typically recorded at "amortized cost" under the valuation manual basis with locked discount rates/mortality assumptions/etc. in most scenarios)
 - Ongoing deferred assets/liabilities are lower (since only includes terminated/matured/de-designated items, less volatility occurs in deferred accounts vs. fair value/mark & spread method where all FV fluctuations are taken to deferred accounts throughout the life)
 - Mark & Spread Method offered as alternate option for regulators
- Due to the aforementioned dynamic nature of these hedging programs, multiple hedge effectiveness tests are required each quarter, and all must be passed to apply either of the above proposals
- Both proposals increase the accuracy of solvency reporting and claims paying ability, and encourage prudent risk management (therefore are in the best interest of policyholders, insurance companies, and ultimately regulators)



SSAP Proposal – ALM Derivatives Amortized Cost Method

Hedged Item:

Duration difference between the designated asset portfolio and designated product liability portfolio
that are both exposed to interest rate risk (with the ultimate hedged item being the interest rate
sensitivity of the liability portfolio that the assets support)

Hedging Instrument:

- A specified derivative, or a portfolio of specified derivatives, that hedges the duration difference of the designated asset and liability portfolios.
- Derivatives with asymmetrical payoff profiles and/or derivative premiums at inception (e.g., options)
 are not eligible for the accounting in this proposal

Clearly Defined Hedging Strategy

- Required to be documented at inception and include specific risks being hedged (including hedge coverage, e.g., percentage of interest rate sensitivity being hedged), hedging objectives, material risks that are not hedged, instruments used to hedge the risks, metrics/criteria/frequency for measuring effectiveness, etc.
- Separate and distinct from SSAP86 & SSAP108



Amortized Cost Method Assessing Hedge Effectiveness

- Hedge effectiveness must be assessed at least quarterly (e.g., at the beginning and end of each quarter)
- The hedging relationship must be highly effective in reducing duration differences and requires use of one of the following methods
 - <u>Modified Duration</u> example: if an asset portfolio has a Modified Duration of 9 and a liability portfolio
 has a Modified Duration of 10, a highly effective derivative portfolio hedging this difference would
 place the Modified Duration of the assets <u>with</u> derivatives at between 9.8 and 10.25 (80%-125% of
 the modified duration difference)
 - <u>Macaulay Duration</u> example: if an asset portfolio has a Macaulay Duration of 9 years and a liability portfolio has a Macauley Duration of 10 years, a highly effective derivative portfolio hedging this difference would place the Macauley Duration of the assets <u>with</u> derivatives at between 9.8 years and 10.25 years (80%-125% of the Macauley Duration difference)
 - <u>DV01</u> example: if an asset portfolio has a DV01 of \$9M and a liability portfolio has a DV01 of \$10M, a highly effective derivative portfolio hedging this difference would place the DV01 of the assets <u>with</u> derivatives at between \$9.8M and \$10.25M (80%-125% of the DV01 difference)



Amortized Cost Method Assessing Hedge Effectiveness (continued)

- Partial Hedge Example if asset portfolio modified duration is 9 and a liability modified duration is 11, an entity can elect to hedge only half the difference (in which case, a duration of the assets with derivatives of between 9.8 and 10.25 would be highly effective)
- Entities must assess hedge effectiveness at inception and on an ongoing basis (i.e., beginning and end of each quarter, since asset/derivative/liability amounts may change during the normal course of business with the dynamic hedge strategy needing to remain highly effective)



Amortized Cost Method Measurement/Recognition

- All designated highly effective hedging derivatives are reported in the financial statements at amortized cost
- Amortized cost treatment will discontinue in the following scenarios:
 - Maturities/Terminations Derivatives that mature or are terminated (with a fair value) will be recognized as deferred assets (admitted) and deferred liabilities (i.e., derivative maturity/termination fair value would initially be surplus neutral with the deferred asset/liability offset by cash received/paid at maturity/termination)
 - De-Designation For derivatives de-designated from a previous highly effective hedging relationship due to ineffectiveness or by election, the derivative fair value will be recognized as an asset/liability offset by a deferred asset (admitted) and deferred liability (i.e., fair value recognition is initially surplus neutral).
 - All prospective (post de-designation) derivative fair value changes are recognized as unrealized gains/losses without deferral unless included as part of a subsequent highly effective hedge.
 - Note a deferred asset/liability can only be recognized for the fair value change up to the last measurement date indicating high effectiveness



Amortized Cost Method Measurement/Recognition (continued)

- As these are essentially quarterly hedges inside a clearly pre-defined program (with effectiveness tests each quarter), programs that fail effectiveness could only apply this guidance in subsequent quarters that effectiveness is achieved (if program parameters don't change materially)
 - If program parameters change materially, then that would represent a new program requiring new documentation, approvals, etc.
- Deferred assets/liabilities are amortized using a straight-line method into Net Gain from Operations ("NGO") over a finite amortization period
 - Amortization timeframe equals the weighted average life (WAL) of the hedged liability portfolio (not to exceed 10 years)
 - Amortization of deferred assets/liabilities for previously highly effective hedging strategies that are no longer highly effective are also over the liability WAL (not to exceed 5 years)
 - Entities may elect to terminate use of this accounting provision at any time, in which case, all
 deferred assets/liabilities shall be amortized to NGO over the remaining amortization timeframe,
 not to exceed 5 years



Amortized Cost Method Example Entries

Example Entries	5		
Change in Value			
	N/A		
Derivative Matu	urity/Termination (if applicable)		
	DR-CR: Cash		surplus neutral
	DR-CR: Deferred Asset/Liab		
Amortization (se	ubsequent quarters for maturities/te	rminations, as applica	ble)
	DR-CR: Deferred Asset/Liab		surplus impact
	DR-CR: Net Investment Income		over amort period
Do Docignation	Example Entries, if applicable:		
	<u>Example Entitles, il applicable.</u>		
De-designation			
	DR-CR: Derivative Asset/Liab		current value
	DR-CR: Deferred Asset/Liab		(surplus neutral)
	Start amortizing		
Subsequent Acc	counting (MTM)		
	DR-CR: Derivative Asset/Liab		(prospective MTM in URGL)
	DR-CR: URGL (Surplus)		J



SSAP Proposal – ALM Derivatives Mark & Spread Method

- Similar in nature and background as amortized cost method (i.e., same hedged item, hedging instrument, clearly defined hedging strategy, effectiveness test, etc.), but with different measurement/recognition and amortization starting point
- Under this method, all designated highly effective hedging derivatives are reported in the financial statements at fair value
 - Fair value fluctuations in the hedging instruments (clean value plus accrued income) attributable to the hedged risk are recognized as deferred assets (admitted) and deferred liabilities (i.e., derivative fair value changes would initially be surplus neutral with the derivative asset/liability fair value offset by the deferral account)
 - Note a deferred asset/liability can only be recognized for the fair value change up to the last measurement date indicating high effectiveness as defined by this proposal



Mark & Spread Method (continued)

- Deferred assets/liabilities are amortized using a straight-line method into NGO over a finite amortization period
 - Amortization for a quarter's derivative fair value change will begin in the following quarter regardless if the derivative fair value change is realized or unrealized
 - Derivative income is included in the fair value change amortization amounts
 - Amortization timeframe equals the weighted average life of the hedged liability portfolio (not to exceed 10 years)
 - Other 5-year amortization period limit scenarios noted previously in the amortized cost method section also apply



Mark & Spread Method Example Entries

xample Entries:								
Change in Value								
	DR-CR: Deriv	ative Asset/Liab		surplus neutral				
	DR-CR: Defe	rred Asset/Liab						
Amortization (subsequent quarter)								
	DR-CR: Defe	rred Asset/Liab		surplus impact				
	DR-CR: Net I	nvestment Incom	over amort period					
Termination Example Entries:								
Termination								
	DR-CR: Cash			surplus neutral				
	DR-CR: Deriv	ative Asset/Liab						
De-Designation Example Entries (if applicable):								
De-designation								
	No entry or surplus impact (deferral already booked; amort. already occurrin							
Subsequent Accounting (MTM)								
	DR-CR: Derivative Asset/Liab			(prospective MTM in URGL)				
	DR-CR: URGL (Surplus)							



Transition

- Guidance noted herein is proposed to be applied on a prospective basis for qualifying programs in place on or after the effective date
- Derivative gains/losses deferred in IMR prior to the effective date continue to be amortized over the remaining amortization period from their original amortization schedule
- Unrealized gains/losses recognized prior to the effective date from derivatives that qualify for the treatment in this proposal on the effective date remain in unrealized g/l and amortize into NGO (surplus neutral) over the WAL of the liabilities they support (subject to limits noted previously).

