August XX, 2023

**To:** Members of the Life Actuarial (A) Task Force

**From:** NAIC Staff

**RE:** Guidance on Allocating Negative IMR (PIMR) In VM-20, VM-21, and VM-30

**Executive Summary**

While the potential admittance of some portion of negative Interest Maintenance Reserve (IMR) is being considered by the Statutory Accounting Practices (E) Working Group (SAPWG), continued guidance on the proper practice for allocating IMR for principles-based reserving (PBR) and asset adequacy testing purposes may be helpful for companies in the near term.

**Background**

LATF issued guidance on November 17, 2022 (Attachment A) on allocating negative IMR (PIMR) in VM-20, VM-30, VM-31. Since then, SAPWG has continued to discuss the potential admittance of some portion of negative IMR. In light of these ongoing discussions, continued guidance is needed to ensure consistent treatment for negative IMR in PBR and asset adequacy testing. Due to the timing of Valuation Manual updates, the earliest that such guidance can practically be added to the Valuation Manual is for year-end 2025. Therefore, LATF is issuing additional guidance for 2023 and 2024.

**Recommendation**

In order to assist state regulators and companies in achieving uniform outcomes for year-end 2023 and 2024 , we have the following recommendation: the allocation of IMR in VM-20, VM-21, and VM-30 should be principle- based, “appropriate”, and “reasonable”. Companies are not required to allocate any non-admitted portion of IMR (or PIMR, as applicable) for purposes of VM-20, VM-21, and VM-30, as being consistent with the asset handling for the non-admitted portion of IMR would be part of a principle-based, reasonable and appropriate allocation. However, any portion of negative IMR that is an admitted asset, should be allocated for purposes of VM-20, VM-21, and VM-30, as again a principle- based, reasonable and appropriate IMR allocation would be consistent with the handling of the IMR asset.

This recommended guidance is for year-end 2023 and 2024, to address the current uncertainty and concerns with the “double-counting” of losses. This recommended guidance will help ensure consistency between states and between life insurers in this volatile rate environment. This guidance is expected to be incorporated in the 2025 Valuation Manual.

# Attachment A

November 17, 2022

**To:** Members of the Life Actuarial (A) Task Force

**From:** NAIC Staff

**RE:** Guidance on Allocating Negative IMR (PIMR) In VM-20, VM-21, and VM-30

**Executive Summary**

With the rapidly rising interest rate environment, companies selling fixed income assets for a loss are seeing their Interest Maintenance Reserve (IMR) balances decrease or even become negative. Current statutory accounting treatment makes negative IMR a non-admitted asset. While a longer-term evaluation of IMR is being considered by the Statutory Accounting Practices (E) Working Group (SAPWG), additional guidance on the proper practice for allocating IMR for Asset Adequacy Testing and Principle-based Reserving purposes may be helpful for companies in the near term.

**Background**

The letter to SAPWG from the American Council of Life Insurers (ACLI) (Attachment 1) notes that “…with the inclusion of a negative IMR balance in asset adequacy testing, the disallowance of a negative IMR can result in double counting of losses (i.e., through the disallowance on the balance sheet and the potential AAT-related reserve deficiency).” There are several sections of the Valuation Manual and RBC instructions where IMR is referenced in the letter. Some of these references contemplate allocating negative IMR (or pre-tax IMR (PIMR), as applicable) at the level of business that is being analyzed/reserved for. However, these references do not detail what to do when the total company IMR balance is negative – and therefore a non-admitted asset under current statutory guidance.

Other references do provide additional insight as to the allocation of IMR when the total company balance is negative/disallowable. VM-20 Section 7.D.7.b notes that “…the company shall use a reasonable approach to allocate any portion of the total company balance that is disallowable under statutory accounting procedures (i.e., when the total company balance is an asset rather than a liability).” Question 22 of the AAA’s Asset Adequacy Practice Note (Attachment 2) states that “… a negative IMR is not an admitted asset in the annual statement. So, some actuaries do not reflect a negative value of IMR in the liabilities used for asset adequacy analysis.” However, Question 22 also notes a 2012 survey data that showed varying practices across companies, including some companies that allocated negative IMR.

**Recommendation**

In order to assist state regulators and companies in achieving uniform outcomes for year-end 2022, we have the following recommendation: the allocation of IMR in VM-20, VM-21, and VM-30 should be principle- based, “appropriate”, and “reasonable”. Companies are not required to allocate any non-admitted portion of IMR (or PIMR, as applicable) for purposes of VM-20, VM-21, and VM-30, as being consistent with the asset handling for the non-admitted portion of IMR would be part of a principle-based, reasonable and appropriate allocation. However, if a company was granted a permitted practice to admit negative IMR as an asset, the company should allocate the formerly non-admitted portion of negative IMR, as again a principle- based, reasonable and appropriate IMR allocation would be consistent with the handling of the IMR asset.

This recommended guidance is for year-end 2022, to address the current uncertainty and concerns with the “double-counting” of losses. This recommended guidance will help ensure consistency between states and between life insurers in this volatile rate environment. Refinement of this guidance may be considered beyond year-end 2022.

# Attachment 1



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October 31, 2022

Mr. Dale Bruggeman, Chairman

Statutory Accounting Principles Working Group National Association of Insurance Commissioners 1100 Walnut Street, Suite 1500

Kansas City, MO 64106-2197

Dear Mr. Bruggeman:

## Re: Proposal for the NAIC to Fulfil the Original Intent of the Interest Maintenance Reserve

The American Council of Life Insurers (ACLI) would like to request urgent action on an issue that was never fully resolved by the NAIC and has become a pressing matter for the industry due to the rapid rise in interest rates the allowance of a net negative Interest Maintenance Reserve (IMR) balance.

The ACLI proposes the allowance of a negative IMR balance in statutory accounting. Negative IMR balances are expected to become more prevalent in a higher interest rate environment and their continued disallowance will only serve to project misleading opt

strength (e.g. inappropriate perception of decreased financial strength through lower surplus and risk- creating uneconomic incentives for asset-liability management (e.g. discourage prudent investment transactions that are necessary to avoid mismatches between assets and liabilities just to avoid negative IMR).

ACLI believes the necessary changes can be implemented quickly and with minimal changes to the annual statement reporting instructions.





The remainder of this letter expands upon these points.

## Historical Context and Background

The IMR, first effective in statutory accounting in 1992, requires that a realized fixed income gain or loss, attributable to changes in interest rates (but not gains or losses that are credit related), be amortized into income over the remaining term to maturity of the fixed income investments (and related hedging programs) sold rather than being reflected in income immediately.

Since statutory accounting practices for life insurance companies are the primary determinant of obtaining an accurate picture for assessing solvency, it was imperative that the accounting practices be consistent for assets, liabilities, and income and that they be reported on a financially consistent basis. If assets and liabilities were not reported on a financially consistent basis, then the financial statements would not be useful in determining an accurate assessment of solvency or whether there were sufficient assets to pay contractual obligations when they become due.

Amortized cost valuation of fixed income investments reflects the outlook at the time of purchase and amortization reflects the yields available at time of purchase. Policy reserve liabilities are established at the same time, and the interest rate assumptions are consistent with the yields at that time. But if fixed income investments are sold, with the proceeds reinvested in new fixed income investments, a new amortization schedule is established which may be based on an entirely different yield environment, which may be inconsistent with the reserve liabilities when they were established.

IMR was created to prevent the timing of the realization of gains or losses on fixed income investments, related to interest rates changes, to affect the immediate financial performance of the insurance company. This recognized that the gains and losses were transitory without any true economic substance since the proceeds would be reinvested at offsetting lower or higher interest rates.

For example, without the IMR, if a company sold all bonds in a declining interest environment (e.g., from 4% to 2%), and reinvested in new bonds, surplus would increase through significant realized gains. The increased surplus would inappropriately reflect increased financial strength that is illusory, due to a now lower yielding portfolio, as there would be no change to the income needed to support the liabilities.

Likewise, if a company sold all bonds in an increasing interest rate environment (e.g., from 2% to 4%), and reinvested in new bonds, surplus would decrease through significant realized losses. The decreased surplus would inappropriately reflect decreased financial strength that is similarly illusory due to the reinvestment at higher yields relative to when the bonds were originally purchased.

A net negative IMR is currently disallowed in statutory accounting. This handling is contrary to its original intent which recognized that interest related gains and losses are both transitory without any true economic substance since the proceeds would be reinvested at offsetting lower or higher interest rates, respectively. See attachment I to this letter that illustrates the financially consistent

treatment of assets, liabilities, and income and how IMR is needed to achieve that objective for both realized gains and losses.

That IMR should conceptually apply to both realized gains and losses was recognized by the NAIC during and after IMR development. The below is a quote from a 2002 report by the NAIC AVR/IMR Working Group to the E-Committee:



*appropriate. If the liability values are based on the assumption that the assets were purchased at about the same time as the liabilities were established, then there should be no bounds to the reserve which corrects for departures from that assumption;* ***if a company has to set up a large reserve because of trading gains, it is in no worse position that if it had held the original assets. As for negative values of the IMR, the same rationale applies*. However, the concept**



While realized losses can offset realized gains in IMR, the IMR instructions require the disallowance of a net negative IMR balance (e.g., as noted in the last sentence of the aforementioned quote). See attachment II to this letter, which includes the pertinent IMR instructions where negative IMR balances are currently disallowed and in need of amendment.

When IMR was originally developed, it was intended to achieve its purpose in both a declining and rising interest rate environment. The originally adopted disallowed status of a negative IMR was expected to be addressed in subsequent years. However, over time with the persistent declining interest rates, the issue lost urgency since a negative IMR would not have been a significant issue for any company. The NAIC AVR/IMR Working Group ultimately disbanded without ever addressing this longstanding item on their agenda.

With a rising interest rate environment, it is important that the allowance of a negative IMR be addressed to fulfill its original purpose. In general, rising interest rates are favorable to the financial health of the insurance industry as well as for policyowners.

Without a change, the rising interest rate environment will give the inappropriate perception of decreased financial strength through lower surplus and risk-based capital and worse, create incentives for insurance companies to take action, or not take actions, to prevent uneconomic surplus impacts where the actions (or lack thereof) themselves may be economically detrimental.

Symmetrical treatment of a negative IMR (i.e., the allowance of a negative IMR balance) would appropriately not change surplus as a sale and reinvestment would not affect the underlying insurance company liquidity, solvency, or claims paying ability, just like with a positive IMR. See attachment III to this letter that illustrates that the sale of a fixed income investment, and

liquidity, solvency, or claims paying ability.

As it was initially recognized by the NAIC that IMR should apply to both gains and losses, adequate safeguards were already built into the IMR instructions for asset adequacy, risk-based capital, and troubled companies.

## Negative IMR Reserve Adequacy and Risk-Based Capital

When IMR was developed, it was anticipated that a negative IMR balance would be reflected in asset adequacy analysis. This inclusion ensures that the assets, with the appropriate allocation from the IMR (whether negative or positive), would be adequate to fund future benefit obligations and related expenses of the company.

From the standpoint of reserve adequacy, the inclusion of a negative IMR balance appropriately reduces the investment income in asset adequacy testing. Without the inclusion of negative IMR, reserve inadequacies would potentially not be recognized.

Further, with the inclusion of a negative IMR balance in asset adequacy testing, the disallowance of a negative IMR can result in double counting of losses (i.e., through the disallowance on the balance sheet and the potential AAT-related reserve deficiency). The Actuarial Opinion that covers asset adequacy analysis requires the appropriate assessment of negative IMR in its analysis.

If a negative IMR balance is used in the asset adequacy analysis, its allowance is appropriate. Likewise,  analysis, only the allowance for that portion of the negative IMR balance reflected is appropriate. If a negative IMR balance is disallowed, it would be inappropriate to include in asset adequacy analysis. It is imperative there is symmetry between both reserving and accounting considerations, and there is already precedent in the asset adequacy analyses for inclusion of IMR.

Below are the current references to IMR in the valuation manual and risk-based capital calculations.

|  |  |  |
| --- | --- | --- |
| Regulation | Use | IMR references |
| Actuarial Opinion and Memorandum  Regulation (VM-30) | Asset adequacy analysis for annual  reserve opinion | An appropriate allocation of assets in the amount of the IMR, whether positive or negative, shall be used in any  asset adequacy analysis. |
| Life principle-based reserves (VM-20) | Calculation of deterministic reserve | Calculate the deterministic reserve equal to the actuarial present value of benefits, expenses, and related amounts less the actuarial present value of premiums and related amounts, less the positive or negative pre-tax IMR  balance at the valuation date allocated to the group of one or more policies being modeled |
| Life principle-based reserves (VM-20) | Calculation of stochastic reserve | Add the CTE amount (D) plus any additional amount  (E) less the positive or negative pre-tax IMR balance allocated to the group of one or more policies being modeled |
| Variable annuities principle-based  reserves (VM-21) | Reserving for variable annuities | The IMR shall be handled consistently with the  -flow testing, and the amounts should be adjusted to a pre-tax basis. |
| C3 Phase 1 (Interest rate risk capital) | RBC for fixed annuities and single  premium life | IMR assets should be used for C3 modeling. |

## Additional IMR Safeguards

The IMR instructions do provide additional safeguards in situations where it would be appropriate to recognize interest-rate related gains and losses immediately rather than be included in the IMR.

They were established to prevent situations where the liability the IMR supports, no longer exists. Examples noted in the annual statement instructions include:

Major book-value withdrawals or increases in policy loans occurring at a time of elevated interest rates.



As a result, the IMR instructions include an IMR Exclusion whereby all gains or losses which arise

and reflected in net income. In short, Excess Withdrawal Activity is defined as 150% of the product of the lower of the withdrawal rate in the preceding or in the next preceding year calendar year times the withdrawal reserves at the beginning of the year.

## Summary

With a rising interest rate environment, it is important that the allowance of a negative IMR be addressed to fulfill its original purpose. In general, rising interest rates are favorable to the financial health of the insurance industry as well as for policyowners. Without a change, the rising interest rate environment will give the inappropriate perception of decreased financial strength through lower surplus and risk-based capital.

The inability to recognize negative IMR could also impact the rating agency view of the industry, or worse, incentivize companies to avoid prudent investment transactions that are necessary to avoid mismatches between assets and liabilities. Furthermore, there are adequate safeguards in place to ensure that allowing a negative IMR does not cause any unrecognized reserve or capital inadequacies or any overstatement of claims paying ability.

Current statutory accounting guidance creates two equally objectionable alternatives for insurers and their policyowners. Following the current statutory guidance will improperly reflect financial strength through understating surplus, so additional surplus may need to be retained. Alternatively, one could take steps to manage the current situation by limiting trading of fixed income investments and related hedging programs, which would diminish significant economic value for policyowners, as well as create a mismatch between assets and liabilities.

Both scenarios encourage short-term non-economic activity not in the best long-term interest of



balances due to the rapid increase in interest rates, this dilemma is either here or fast approaching and can only be resolved now with certainty of the appropriate treatment of IMR by the NAIC.

The ACLI looks forward to urgently working with the NAIC toward fulfilling the original intent of IMR. It is imperative that insurers receive relief for year-end 2022.

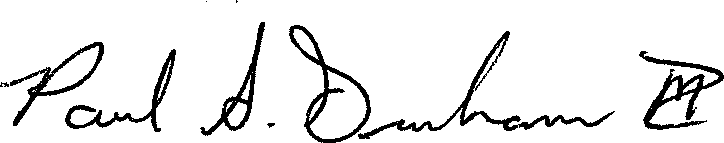
If you have any questions regarding this letter, please do not hesitate to contact us.

Sincerely,



Mike Monahan

Senior Director, Accounting Policy



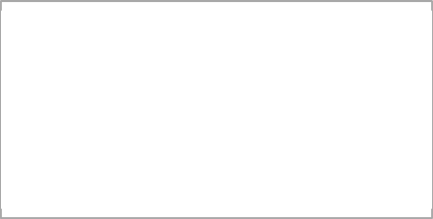
Paul Graham

Senior Vice President, Chief Actuary



**Simplified Example Need for Reporting Assets, Liabilities, and Income on a Consistent Basis:** This example shows the appropriate interrelationship of IMR on assets, reserve liabilities, and income. Assume a bond is held with the following characteristics:

* Par Value: $1,000
* Coupon: 3%
* Term-to-maturity: 10 years



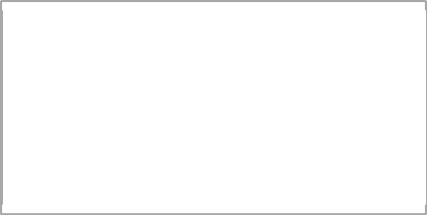
Realized gain/(loss) deferred to balance sheet IMR and amortized into income over remaining life of bond sold (i.e., 10 years).



the same characteristics (e.g., term-to maturity, credit quality, coupon equivalent to market rate, etc.). Assume a simplified example with no existing IMR balance, where the bond supports a fixed insurance liability with the same duration as the original bond, as well as a present value of $1,000.

|  |  |  |  |
| --- | --- | --- | --- |
| **Table 1: Market Interest Rate Scenario** | | | |
|  | **Same** | **Lower** | **Higher** |
| Market interest rate | 3% | 2% | 4% |
|  | $1,000 | $1,090 | $919 |
| Realized gain/(loss) if sold | $0 | $90 | ($81)\* |

On average, future income is approximately the same in each interest rate scenario as the IMR gets reduced through amortization to income.



Even though the sale of the bond (and subsequent reinvestment) is non-economic, and the same income is being produced to support the liability, a negative surplus position makes it appear there is now a deficiency. Allowing the negative IMR appropriately would show no surplus impact, as is shown when a gain occurs, as there is no change in reported reserve liabilities.

Appropriately consistent financial results require the allowance of negative IMR

|  |  |  |  |
| --- | --- | --- | --- |
| **Table 2: Statutory Investment Income** | | | |
| IMR amortization | $0 | $9 | ($8) |
| Interest income on new bond | $30 | $21 | $38 |
| Total annual stat income | $30 | $30 | $30 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Table 3: Statutory Balance Sheet** | | | |
| Balance Sheet Bonds | $1,000 | $1,090 | $919 |
| IMR | $0 | ($90) | $0\* |
| Stat assets net of IMR | $1,000 | $1,000 | $919\* |
|  |  |  |  |
| Reserves | $1,000 | $1,000 | $1,000 |
| Surplus | $0 | $0 | ($81)\* |

**\*The negative IMR balance is currently disallowed and directly reduces surplus. This treatment is not supported by theoretical rationale and gives a distorted view of solvency.**

**Pertinent Annual Statement Instructions**

## Attachment II

Line 6 Reserve as of December 31, Current Year



Page 3, Line 9.4 of the General Account Statement and Line 3 of the Separate Accounts Statement. A negative IMR balance may be recorded as a negative liability in either the General Account or the Separate Accounts Statement of a company only to the extent that it is covered or offset by a positive IMR liability in the other statement.

If there is any disallowed negative IMR balance in the General Account Statement, include the change in the disallowed portion in Page 4, Line 41 so that the change will be appropriately charged or credited to the Capital and Surplus Account on Page 4. If there is any disallowed negative IMR balance in the Separate Accounts Statement, determine the change in the disallowed portion (prior year less current year disallowed portions), and make a direct

-in

line, in the Surplus Account on Page 4 of the Separate Accounts Statement.

The following information is presented to assist in determining the proper accounting:

General Account IMR Balance

Separate Account IMR Balance

Net IMR Balance

Positive Positive Positive (see rule a)

Negative Negative Negative (see rule b)

Positive Negative Positive (see rule c)

Positive Negative Negative (see rule d)

Negative Positive Positive (see rule e)

Negative Positive Negative (see rule f)

Rules:

1. If both balances are positive, then report each as aa liability in its respective statement.
2. If both balances are negative, then no portion of the negative balances is allowable as a negative liability in either statement. Report a zero for the IMR liability in each statement and follow the above instructions for handling disallowed negative IMR balances in each statement.
3. If the general account balance is positive, the separate accounts balance is negative and the combined net balance is positive, then all of the negative IMR balance is allowable as a negative liability in the Separate Accounts Statement.
4. If the general account balance is positive, the separate account balance is negative, and the combined net balance is negative, then the negative amount not covered by the positive amount is not allowable. Report only the allowable portion as a negative liability in the Separate Accounts Statement and follow the above instructions for handling the disallowed portion of negative IMR balances in the Separate Accounts Statement.
5. If the general account balance is negative, the separate account balance is positive, and the combined net balance is positive, then all of the negative IMR balance is allowable as a negative liability in the General Account Statement.
6. If the general account balance is negative, the separate account balance is positive, and the combined net balance is negative, then the negative amount not covered by the positive amount is not allowable. Report only the allowable portion as a negative liability in the General Account Statement and follow the above instructions for handling the disallowed portion of negative IMR balances in the General Account Statement.

Attachment III

IMR Illustration Liquidity, Solvency and Claims Paying Ability

Essentially, a negative IMR balance from an individual trade represents the present value of the future positive interest rate differential, from the new investment compared to the old investment, that puts one in the same economic position, when compared to before the trade, including total liquid assets available to pay claims.

This phenomenon can be illustrated in the following table where a 10-year bond is sold, one year after purchase, and immediately reinvested in another 10-year bond with equivalent credit quality in an interest rate environment where market interest rates increased from 2% to 4% in the intervening year.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Coupon Rate of Bond | Market Interest Rate @  Purchase | Par Value  of Bond | Fair Value @ Purchase | Fair Value @ Time of  Sale | Loss on Sale | Claims Paying Liquidity |
| Old Bond | 2% | 2% | 100 | 100 | 85.13 | 14.87 | 85.13 |
| New Bond | 4% | 4% | 85.13 | 85.13 | 85.13 | N/A | 85.13 |

The short-term acceleration of negative IMR to surplus (e.g., its disallowance) is strictly a timing issue and not a true loss of financial strength or claims paying liquidity, but it does present a temporary and inappropriate optics issue in surplus/financial strength until the IMR is fully amortized.

This phenomenon can further be illustrated by comparing two separate hypothetical companies. Assume Company A and B both have the exact same balance sheets. Then assume Company A keeps the old bond and Company B affects the trade mentioned above.

With the disallowance of a negative IMR balance, Company B now has a balance sheet that shows a relative decline of financial strength of $14.87. This weakened balance sheet contrasts with both the principle behind the development of IMR, the relative actual economic financial strength, and claims paying ability of the two entities.

There is no difference in balance sheet economics of the two entities. The negative IMR balance for Company B essentially represents the difference between cost and fair value of the investment sold, that is already embedded on eet based on the existing interest rate environment. The negative IMR balance should be recognized as there is no change in economics pre and post trade (or in this instance between Company A and Company B) which is consistent with the overall principle behind IMR.

# Attachment 2

Some actuaries test the option risk in assets (e.g., calls) by assuming an immediate drop in the discount rate used in the GPV. The drop test is often set as severe as needed to represent a drop in earned rate that would occur if all options were exercised.

## Q22. The AOMR states that the interest maintenance reserve (IMR) should be used in asset adequacy analysis. Why?

The IMR is part of the total reported statutory reserves. The IMR typically defers recognition of the portion of realized capital gains and losses resulting from changes in the general level of interest rates. These gains and losses are amortized into investment income over the expected remaining life of the investments sold, rather than being recognized immediately. This amortization is after tax.

The purpose of the IMR usually is to maintain the original matching between assets and liabilities that might be weakened by the sale of an asset. Originally, it was anticipated that the IMR would be allowed to become negative, as long as the asset adequacy analysis showed that the total statutory reserves, including the negative IMR, were sufficient to cover the liabilities. However, a negative IMR is not an admitted asset in the annual statement. So, some actuaries do not reflect a negative value of IMR in the liabilities used for asset adequacy analysis.

In the 2012 survey of appointed actuaries, more than 80 percent of the respondents indicated they include the IMR in their testing. Some actuaries use a starting IMR of zero if IMR is negative. Other actuaries use negative IMR to adjust starting assets and therefore model future lower asset yields than if zero IMR were assumed. Half of the respondents who indicated they used IMR in testing also indicated they lower assets by the absolute value of a negative IMR balance; the other half indicated they use a value of zero for the starting IMR if it is negative at the beginning of the projection period. There is no prohibition regarding the use of negative IMR within asset adequacy analysis. So, a number of actuaries allow the IMR to fall below zero within the testing period. About 60 percent of actuaries responding to the survey indicated they do not have to deal with a negative IMR.

## Q23. How does the actuary determine which portion of the IMR can be used to support certain products? How is the portion of the IMR used?

If the actuary allocates the assets and IMR by line, then one possible approach is line of business-level inclusion of starting assets in the amount of the unamortized portion of the IMR relating to those assets that were owned by the line prior to being sold. Another possible approach is the allocation of company-level IMR proportionately to starting assets. An advantage of this second approach is that it is generally simpler, while a disadvantage is that longer liabilities probably have longer assets, which usually produce higher capital gains when sold, after a given drop in interest rates, than shorter assets do,