How a market value adjustment works

Some products apply a market value adjustment (MVA) if you surrender your annuity contract during the early withdrawal charge period or take a withdrawal that exceeds your free withdrawal amount during the early withdrawal charge period.

How it's calculated

The MVA is calculated by comparing the interest rate environment when you purchased your contract to the environment when you choose to take a withdrawal or surrender your contract. The interest rates used in the calculation are the 5-Year Treasury Constant Maturity Series published by the Federal Reserve and/or the BofA Merrill Lynch 5-10 Year US Corporate Bond Index.

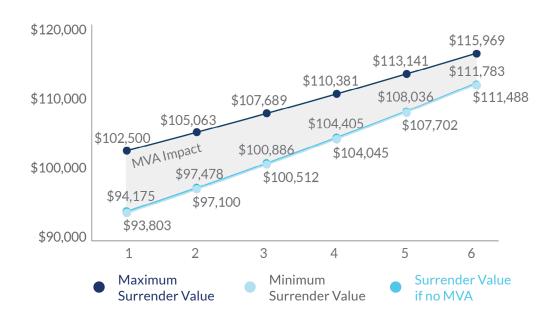
The adjustment can be positive or negative.

- If interest rates have decreased, the
 adjustment may be positive and result in an
 increase to your surrender value. A positive
 adjustment will never be greater than the
 early withdrawal charge that applies to the
 withdrawal or surrender.
- If interest rates have remained steady or increased, the adjustment may be negative and result in a decrease to your surrender value. A negative adjustment will never reduce your surrender value to less than the minimum permitted under the standard non-forfeiture law of your state.

Hypothetical example

Pam purchases an annuity with a \$100,000 purchase payment. The annuity has a seven-year early withdrawal charge period.

Even though an annuity is designed as a long-term product, Pam decides to surrender her contract at the end of year six. Since the early withdrawal charge period has not ended, the MVA applies. The following graph shows the potential range of Pam's surrender value if the interest rates go up or go down.



If interest rates go down and the maximum positive MVA applies, the surrender value will be \$115,969.

If interest rates go up and the maximum negative MVA applies, the surrender value will be \$111,488.

If there was no MVA, the surrender value would be \$111.783.

For advice tailored to your specific circumstances, contact your financial professional.

Merrill Lynch, Pierce, Fenner & Smith Incorporated and its affiliates ("BofA Merrill Lynch") indices and related information, the name "Bank of America Merrill Lynch", and related trademarks, are intellectual property licensed from BofA Merrill Lynch, and may not be copied, used, or distributed without BofA Merrill Lynch's prior written approval. The licensee's products have not been passed on as to their legality or suitability, and are not regulated, issued, endorsed, sold, guaranteed, or promoted by BofA Merrill Lynch. BOFA MERRILL LYNCH MAKES NO WARRANTIES AND BEARS NO LIABILITY WITH RESPECT TO THE INDICES, ANY RELATED INFORMATION, ITS TRADEMARKS, OR THE PRODUCT(S) (INCLUDING WITHOUT LIMITATION, THEIR QUALITY, ACCURACY, SUITABILITY AND/OR COMPLETENESS).

The example above is hypothetical and assumes the annuity contract earns a 2.50% annual interest rate. The interest rate does not represent the actual interest rate your contract may earn. The assumptions include that no partial withdrawals or loans were taken prior to full surrender. Withdrawals made prior to age 59% may be subject to restrictions and a 10% tax penalty. The potential MVA is based on the NAIC Standard Nonforfeiture Law for Individual Deferred Annuities model regulation, and as such the MVA minimums could vary by state. An MVA does not apply to all products or in all states. The MVAs shown in the example are the maximum positive and negative MVAs and are not based on actual interest rates.

Products issued by MassMutual Ascend Life Insurance CompanySM (Cincinnati, Ohio), a wholly owned subsidiary of Massachusetts Mutual Life Insurance Company (MassMutual).Products not available in all states.

All guarantees based on the claims-paying ability of the issuing company.

This content does not apply in the state of New York.

NOT A BANK OR CREDIT UNION DEPOSIT OR OBLIGATION • NOT FDIC OR NCUA-INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • MAY LOSE VALUE • NOT GUARANTEED BY ANY BANK OR CREDIT UNION

... MassMutual Ascend