Milliman Defined Outcome Strategy

Milliman FRM's Defined Outcome Strategy capabilities are designed to create clearly defined investment outcomes across broad asset classes and through multiple product structures. A defined outcome investment is one that restructures an investment's upside and/or downside participation, over a specified outcome period.



Structured exposures to broad equity indexes.



Defined levels of upside participation and downside protection.



May be implemented through multiple product wrappers.

Defined outcome investment strategies have existed for decades within certain OTC bank and insurance products. Through its innovative use of option contracts, Milliman FRM is a pioneer in the delivery of defined outcome strategies, with the ability to manage them in a variety of investment and insurance vehicles, including: ETFs, UITs, ETNs, indexed annuities, and variable annuities.

MANUFACTURING A DEFINED OUTCOME

Defined outcomes are generally manufactured by layering several option positions, each one serving a distinct purpose. These layers combine to create the following defined outcome components:

Downside profile, such as a:

- Floor: a level the portfolio won't be below at the end of the outcome period
- Buffer: a downside return range of the underlying from which the portfolio is protected at the end of the outcome period
- Participation rate: the rate at which the portfolio will have participated in any return over the course of the full outcome period.

Upside profile, such as a:

- Cap: the maximum return that the portfolio can earn over the full outcome period
- Multiple: an enhanced (>1)
 participation rate in the return of the
 underlying, generally to a cap
- Participation rate: the rate at which the portfolio will have participated in any positive return over the course of the full outcome period

Outcome period:

 the time period (e.g. 1 year) in which the defined return outcome is realized

MILLIMAN CAPABILITIES

Milliman FRM can manufacture defined outcome strategies on broad indexes with standardized index options or FLEX options, and on individual equities through equity options. Through its trading desks, located strategically in Chicago, London, and Sydney, Milliman FRM is positioned to trade options and other derivatives to manage defined outcome strategies around the clock and the globe.



Creating transformational improvement in the retirement savings industry.

Chicago

71 S. Wacker Drive 31st Floor Chicago, IL 60606 United States Tel: +1 312 726 0677

London

11 Old Jewry Third Floor London, EC2R 8DU United Kingdom Tel: +44 207 847 1500

Amsterdam

Haaksbergweg 75 Amsterdam 1101 BR Netherlands Tel: +31 6 211 70 583

Sydney

Level 5 32 Walker Street Sydney, NSW 2060 Australia

Tel: +61 2 8090 9100



Milliman Financial Risk Management LLC is a global leader in financial risk management to the retirement savings industry. Milliman FRM provides investment advisory, hedging, and consulting services on approximately \$161 billion in global assets (as of December 31, 2022). Established in 1998, the practice includes over 200 professionals operating from four trading platforms around the world (Chicago, London, Amsterdam and Sydney). Milliman FRM is a subsidiary of Milliman, Inc.

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

For more information, visit frm.milliman.com

The information, products, or services described or referenced herein are intended to be for informational purposes only. This material is not intended to be a recommendation, offer, solicitation or advertisement to buy or sell any securities, securities related product or service, or investment strategy, nor is it intended to be to be relied upon as a forecast, research or investment advice

The products or services described or referenced herein may not be suitable or appropriate for the recipient. Many of the products and services described or referenced herein involve significant risks, and the recipient should not make any decision or enter into any transaction unless the recipient has fully understood all such risks and has independently determined that such decisions or transactions are appropriate for the recipient. Investment involves risks. Any discussion of risks contained herein with respect to any product or service should not be considered to be a disclosure of all risks or a complete discussion of the risks involved. Investing in foreign securities is subject to greater risks including: currency fluctuation, economic conditions, and different governmental and accounting standards. There are risks associated with futures contracts. Futures contract positions may not provide an effective hedge because changes in futures contract prices may not track those of the securities they are intended to hedge. Futures create leverage, which can magnify the potential for gain or loss and, therefore, amplify the effects of market, which can significantly impact performance. There are also risks associated with investing in fixed income securities, including interest rate risk, and credit risk.

The recipient should not construe any of the material contained herein as investment, hedging, trading, legal, regulatory, tax, accounting or other advice. The recipient should not act on any information in this document without consulting its investment, hedging, trading, legal, regulatory, tax, accounting and other advisors. Information herein has been obtained from sources we believe to be reliable but neither Milliman Financial Risk Management LLC ("Milliman FRM") nor its parents, subsidiaries or affiliates warrant its completeness or accuracy. No responsibility can be accepted for errors of facts obtained from third parties.

The materials in this document represent the opinion of the authors at the time of authorship; they may change, and are not representative of the views of Milliman FRM or its parents, subsidiaries, or affiliates. Milliman FRM does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman FRM. Milliman Financial Risk Management LLC is an SEC-registered investment advisor and subsidiary of Milliman, Inc.

© 2023 Milliman Financial Risk Management LLC - 1/23

