Finding Value in U.S. Markets

Shiller Barclays CAPE®
US Sector Risk Controlled 10%
USD Total Return Index

This material is provided by Athene Annuity and Life Company (61689) headquartered in West Des Moines, Iowa, which issues annuities in 49 states (excluding NY) and D.C., and Athene Annuity & Life Assurance Company of New York (68039) headquartered in Pearl River, New York, which issues annuities only in New York. Products not available in all states.
An Index Designed by Professor Robert J. Shiller and Barclays

Robert J. Shiller is Professor of Economics and Finance at Yale University, the best-selling author of *Irrational Exuberance* and co-developer of the CAPE® Ratio.

Barclays is a global investment and retail bank with expertise in investment banking and wealth management.

The Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index (The Index) was developed based on the principles described in this brochure. The Index was established on February 3, 2014, and any performance shown before this date is back-tested by applying the index strategy to historical financial data.

This brochure was designed to provide information on the Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index and should only be used in conjunction with materials for the BCA® suite of fixed indexed annuities (FIAs) from Athene Annuity and Life Company, including BCA 2.0 and Athene® Velocity. Barclays is not the issuer or producer of the BCA suite of FIAs. Barclays relationship to the BCA products described in this brochure is only licensing of the Index to Athene Life and Annuity Company, in exchange for a fee, for use in connection with the BCA suite of FIAs. Fixed indexed annuities are not an investment and do not directly invest in the stock market or any index. It is not possible to invest directly in an index. Please ask your insurance professional and refer to a specific BCA suite of FIAs product brochure and inserts for more information on fees, restrictions and limitations.
The Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index is a rules-based equity index. A rules-based approach removes emotions, decisions and the need to time the market. The Index applies well-established principles for asset selection and allocation with a goal of providing positive long-term returns.

Each month, a defined set of rules is used to invest in four market sectors of the U.S. economy. Each day, the Index has the ability to allocate a portion to cash and a portion to the Shiller Barclays CAPE® US Sector Total Return Index based on the demonstrated stability of the equity market to help reduce potential risk and increase potential long-term returns. Two core principles are applied for sector selection and allocation:

- **Value Investing**
  
  Value investing is a well-known and recognized investment style dating back to the 1930s. Value investors actively seek to buy assets when the price is low and sell when the price is high.

- **Strategic Re-Allocation**
  
  Rapid changes in the market can be a sign of increased overall risk. When the market is moving rapidly — up or down — there is a greater chance of short-term loss. Strategic re-allocations reduce exposure to equities when the market is unstable.

The CAPE® ratio is a tool developed by Professor Shiller to identify assets that appear to be undervalued. The CAPE® ratio compares the current price to the average earnings over 10 years, adjusting for inflation. A lower CAPE® ratio is considered to be an indicator that an asset is undervalued. The Shiller Barclays CAPE® US Sector Total Return Index relies on a modified version of the classic CAPE® ratio called the Relative CAPE® Indicator.
A monthly sector selection seeks to identify values. To identify potentially undervalued market sectors, the 11 market sectors of the U.S. economy are evaluated to identify the five that appear to be most undervalued. An additional screen then eliminates one market sector with the least price momentum over the prior 12 months. Equal allocations are made in the remaining four sectors.

The 11 market sectors represented in the Shiller Barclays CAPE® US Sector Total Return Index are: Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrial, Materials, Real Estate, Information Technology, Communication Services and Utilities.¹

¹ Each market sector is represented by an exchange-traded fund.
Strategic Re-Allocation Helps Provide Smoother Returns

Rapid movement in the market, or volatility, can create greater potential risk to long-term returns. The Index attempts to reduce the impact of short-term volatility in the equity market sectors through daily re-allocations between the equity sectors selected by the Shiller Barclays CAPE® US Sector Total Return Index and a cash account.

The Index seeks to maintain a 10% annualized volatility target. If volatility falls below the target, the allocation to the equity market sectors is increased up to a maximum of 150%. If volatility is greater than the target, allocations to the equity market sectors may be reduced. Allocations below 100% to the equity market sectors will be reallocated to a cash account.²

Key Terms and Definitions

CAPE® Ratio – A statistical tool used to identify potential values, the CAPE® Ratio compares the current price to the average earnings over 10 years, adjusted for inflation.

Market sectors – Types of companies grouped based on the goods or services they produce, such as Health Care or Energy.

Momentum – An indicator of a positive or negative trend in an asset’s price movement over time. Momentum is calculated by comparing the market sector’s current price to the price of the sector 12 months prior.

Relative CAPE® Indicator – Measures the current CAPE® ratio compared to its rolling 20-year average. The Relative CAPE® Indicator helps the Index avoid repeatedly selecting sectors with low ratios and exclude sectors with high ratios without considering inherent, long-term differences that cause some sectors to consistently trade at higher or lower classic CAPE® ratios than others over time.

² Following periods of high short-term volatility, the Index may allocate up to 100% to the cash account, which earns interest based on the 1-month USD LIBOR rate.
An Opportunity for Positive Long-Term Returns

Well-established principles of identifying value and risk control have historically provided positive returns that outpace the broader market. The graph below illustrates actual and back-tested performance of the Index. The Index would have applied value investing and strategic re-allocation methodologies to provide a 10.11% compound annual return.

*Hypothetical Assumptions: $100 invested in the Shiller Barclay’s CAPE® Index™ from 12/31/02 to 12/31/19. The Shiller Barclay’s CAPE® Index was established on 2/3/14. Performance shown before this date for the Shiller Barclay’s CAPE® Index is back-tested by applying the index strategy, which was designed with the benefit of hindsight, to historical financial data. Back-tested performance is hypothetical and has been provided for informational purposes only. Past performance is not indicative of nor does it guarantee future performance or results. The foregoing performance information does not include any relevant costs, participation rates and charges associated with the BCA suite of FIA or any other financial product linked to the Shiller Barclay’s CAPE® Index. For more information on the BCA suite of FIA and performance with the Shiller Barclay’s CAPE® Index, ask your insurance professional for an illustration.
The Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index is a trademark owned by Barclays Bank PLC and licensed for use by Athene Annuity and Life Company as the Issuer of the product. Barclays only relationship with the Issuer in respect of Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index is the licensing of the Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index, which is determined, composed and calculated by Barclays without regard to the Issuer or the product or the owners of the product. Additionally, Athene Annuity and Life Company as Issuer of the product may for itself execute transaction(s) with Barclays in or relating to the Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index nor enter into any relationship of any kind whatsoever with Barclays upon making a purchase of the product. The product is not sponsored, endorsed, sold or promoted by Barclays. Barclays does not make any representation or warranty, express or implied regarding the advisability of purchasing the product or the ability of the Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index to track corresponding or relative market performance. Barclays has not passed on the legality or suitability of the product with respect to any person or entity. Barclays is not responsible for and has not participated in the determination of the timing of, prices at, or quantities of the product to be issued. Barclays has no obligation to take the needs of the Issuer or the owners of the product or any other third party into consideration in determining, composing or calculating the Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index. Barclays has no obligation or liability in connection with administration, marketing of the product. The Shiller Barclays CAPE® US Index Family has been developed in part by RSBB, LLC, the research principal of which is Robert J. Shiller. RSBB, LLC is not an investment advisor and does not guarantee the accuracy and completeness of the Shiller Barclays CAPE® US Index Family or any data or methodology either included therein or upon which it is based. RSBB, LLC shall have no liability for any errors, omissions or interruptions therein and makes no warranties expressed or implied, as to the performance or results experienced by any party from the use of any information included therein or upon which it is based, and expressly disclaims all warranties of the merchantability or fitness for a particular purpose with respect thereto, and shall not be liable for any claims or losses of any nature in connection with the use of such information, including but not limited to, lost profits or punitive or consequential damages even, if RSBB, LLC is advised of the possibility of same. The licensing agreement between Athene Annuity and Life Company and Barclays is solely for the benefit of Athene Annuity and Life Company and Barclays and not for the benefit of the owners of the product or other third parties. BARCLAYS SHALL HAVE NO LIABILITY TO THE ISSUER, PURCHASERS OR TO OTHER THIRD PARTIES FOR THE QUALITY, ACCURACY AND/OR COMPLETENESS OF THE SHILLER BARCLAYS CAPE® US SECTOR RISK CONTROLLED 10% USD TOTAL RETURN INDEX OR ANY DATA INCLUDED THEREIN OR FOR INTERRUPTIONS IN THE DELIVERY OF THE SHILLER BARCLAYS CAPE® US SECTOR RISK CONTROLLED 10% USD TOTAL RETURN INDEX. BARCLAYS MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY THE ISSUER, THE PURCHASERS OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE SHILLER BARCLAYS CAPE® US SECTOR RISK CONTROLLED 10% USD TOTAL RETURN INDEX OR ANY DATA INCLUDED THEREIN. BARCLAYS MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE SHILLER BARCLAYS CAPE® US SECTOR RISK CONTROLLED 10% USD TOTAL RETURN INDEX OR ANY DATA INCLUDED THEREIN. BARCLAYS MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE SHILLER BARCLAYS CAPE® US SECTOR RISK CONTROLLED 10% USD TOTAL RETURN INDEX OR ANY DATA INCLUDED THEREIN. BARCLAYS RESERVES THE RIGHT TO CHANGE THE METHODS OF CALCULATION OR PUBLICATION, OR TO CEASE THE CALCULATION OR PUBLICATION OF THE SHILLER BARCLAYS CAPE® US SECTOR RISK CONTROLLED 10% USD TOTAL RETURN INDEX, AND BARCLAYS SHALL NOT BE LIABLE FOR ANY Miscalculation of or any incorrect, delayed or interrupted publication with respect to any of Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index. Barclays shall not be liable for any damages, including, without limitation, any special, indirect or consequential damages, or any lost profits and even if advised of the possibility of such, resulting from the use of the Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index or any data included therein or with respect to the product. Because the index applies a volatility control mechanism, the range of both the positive and negative performance of the index is limited. The index is managed to create stabilized performance and avoid very high positive returns and very low negative returns. None of the information supplied by Barclays and used in this publication may be reproduced in any manner without the prior written permission of Barclays Capital, the investment banking division of Barclays Bank PLC. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place London E14 5HP. Barclays and Shiller Barclays CAPE® US Sector Risk Controlled 10% USD Total Return Index are trademarks of Barclays Bank PLC or its affiliates ("Barclays") and have been licensed for use in connection with the issuance and distribution of the product. The product is not sponsored by, endorsed, sold or promoted by Barclays, and Barclays makes no representation regarding the advisability of purchasing it.
We are Athene. And we are relentless when it comes to creating an innovative portfolio of fixed annuities to meet your accumulation and retirement income needs.

At Athene, we see every day as a new opportunity to measure ourselves against the best – and then we don’t stop until we’ve set the bar even higher. We stand ready to help you achieve more.