nuveen
A TIAA Company

The ongoing case for Senior Loans

Global Fixed Income

Marketing communication

Tony Appiah, Managing Director
Client Portfolio Manager

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.
PLEASE REFER TO DISCLOSURES FOR IMPORTANT INFORMATION.

Important information on risk

All investments carry a certain degree of risk, including loss of principal, and there is no assurance that an investment will provide positive performance over any period of time. Derivative instruments for hedging purposes or as part of the investment strategy may involve risks such as liquidity risk, interest rate risk, market risk, credit risk, or management risk. There is no guarantee that the use of these instruments will succeed in mitigating volatility and interest rate risk. Any investment in collateralized loan obligations or other structured vehicles involves significant risks not associated with more conventional investment alternatives.

Credit risk may be heightened for the portfolios that invest a substantial portion of their assets in "high yield" debt or loans with low credit ratings. These securities, while generally offering higher yields than investment-grade debt with similar maturities, involve greater risks, including the possibility of interest deferral, default or bankruptcy, and are regarded as predominantly speculative with respect to the issuer's capacity to pay dividends or interest and repay principal.

The London Interbank Offered Rate or LIBOR, is used throughout global banking and financial industries to determine interest rates for a variety of financial instruments (such as debt instruments and derivatives) and borrowing arrangements. The United Kingdom’s Financial Conduct Authority has undertaken a multi-year phase out of LIBOR. As a result, the administrator of LIBOR ceased publishing certain LIBOR settings after December 31, 2021 and expects to cease publication of all settings after June 30, 2023. The transition away from LIBOR may involve, among other things, increased volatility or illiquidity in markets for instruments that currently rely on LIBOR, such as floating-rate debt obligations. Libor risk is assessed quarterly in arrears.

Responsible investing incorporates Environmental Social Governance (ESG) factors that may affect exposure to issuers, sectors, industries, limiting the type and number of investment opportunities available, which could result in excluding investments that perform well.

Issuers of high yield securities may be highly leveraged and may have fewer methods of financing available. The prices of these lower grade securities are typically more sensitive to negative developments, such as a decline in the issuer's revenues or a general economic downturn, than are the prices of higher grade securities. The secondary market for high yield securities may not be as liquid as the secondary market for more highly rated securities, a factor which may have an adverse effect on a portfolio's ability to dispose of a particular security. There are fewer dealers in the market for high yield securities than for investment grade obligations. The prices quoted by different dealers may vary significantly and the spread between the bid and ask price is generally much larger than for higher quality instruments. Under adverse market or economic conditions, the secondary market for high yield securities could contract further, independent of any specific adverse changes in the condition of a particular issuer, and these instruments may become illiquid. As a result, a portfolio could find it more difficult to sell these securities or may be able to sell the securities only at prices lower than if such securities were widely traded.

Nuveen Asset Management, LLC is a registered investment adviser an affiliate of Nuveen, LLC. Nuveen, LLC provides investment solutions through its investment specialists.

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

The ongoing case for senior loans

What are senior loans?

- **Loans are issued by below-investment grade companies** and purchased by institutional investors
- **Loans are senior secured** and have a **floating rate coupon** that adjust with short term rates
- Represent a market that has grown to over $1.4 trillion, in the institutional asset class and an indispensable component of corporate finance
- Senior loans offer the **seniority and floating rate features** of middle-market Direct Lending but with **exposure to larger companies and daily fund liquidity**

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

What makes senior loans a compelling asset class?

FEATURES		FLOATING RATE INCOME	SENIOR STATUS	SECURED
POTENTIAL BENEFITS	For lenders/investors	Senior loans' income payments typically reset every 30 to 90 days and rise as interest rates rise. Spreads also tend to be higher vs. high-grade bonds.	Since senior loans sit at the top of the capital structure, loan lenders are paid before other lenders or debt holders.	Loans are secured by company assets and typically have a higher recovery rate in the capital structure.
	For borrowers	If rates decrease, borrowers pay less debt. (Conversely, if rates rise the borrower will pay more.)	Senior loans are often the lowest cost funding options available for below-investment grade companies.	Borrowers may receive more favorable terms for repayment of the loan.

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Confidential (C)

How do senior loans differ from traditional bonds?

Senior loan coupons float, whereas bond coupons are fixed

Senior loans vs. bonds when interest rates change

	Interest rates increase	***Interest rates decrease***
SENIOR LOANS	*Prices remain stable*	*Prices remain stable*
	Income increases	*Income decreases*
BONDS	*Prices decrease*	*Prices increase*
	Income remains stable	*Income remains stable*

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

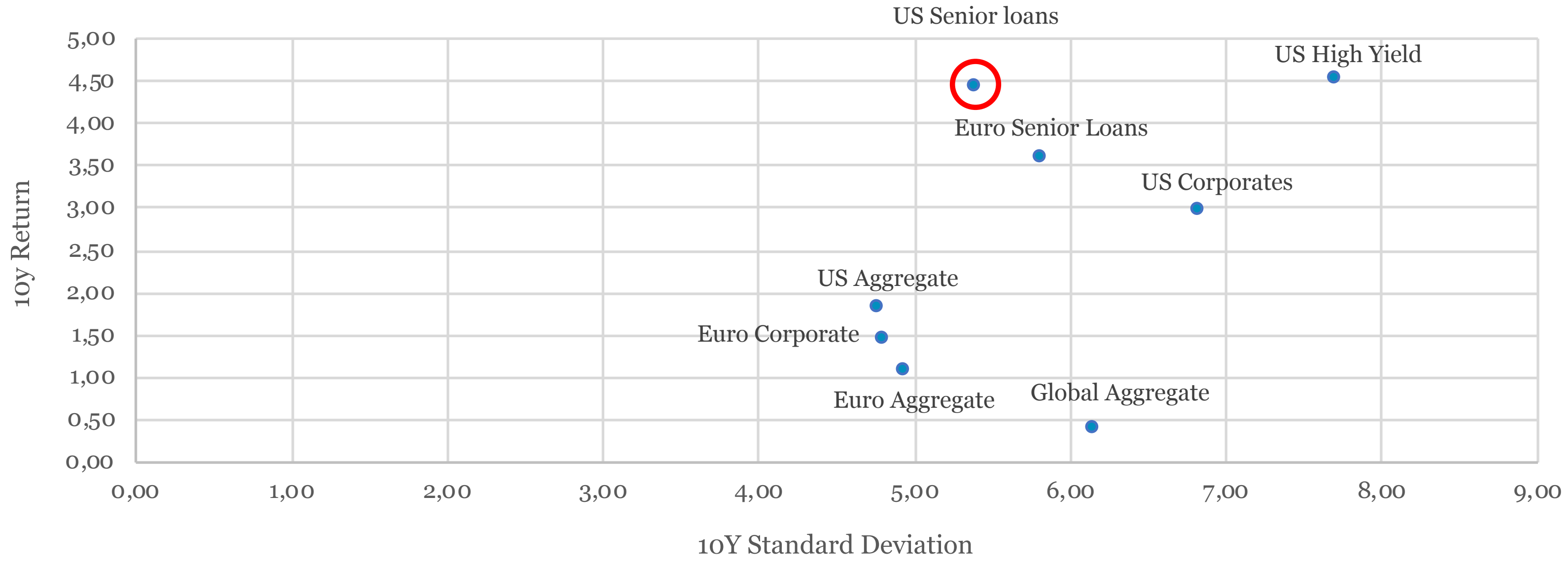
Confidential (C)

Senior loans may provide compelling returns and volatility vs. other bond categories

Relative to most bond categories, senior loans have historically provided increased income, lower volatility and low sensitivity to interest rate changes

Comparison of returns and standard deviations across fixed income sectors

(As of 31 Dec 2023)



The chart does not represent the past performance or yield of any Nuveen fund. For fund performance information, visit nuveen.com.

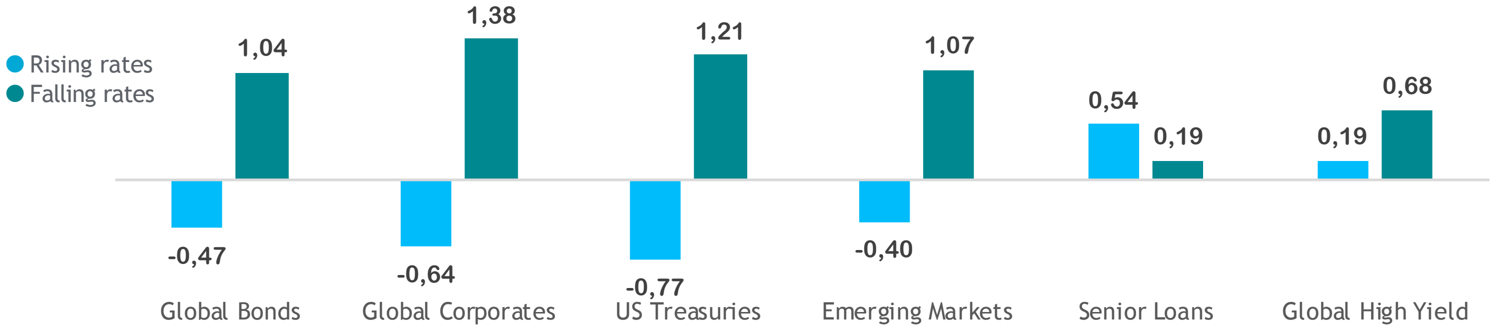
Past performance does not predict or guarantee future results. Representative indexes: Global Aggregate: Bloomberg Global Aggregate Index; Euro Aggregate: Bloomberg Euro Aggregate 500MM Index; Euro Corporate: Bloomberg Euro Corporate Index; U.S. Corporate: Bloomberg US Corporate Index; U.S. High Yield: ICE BofA US High Yield Index; European Loans: Credit Suisse Western Europe LL Index TR; US Senior loans: Credit Suisse LL Index. As of 31 December 2023, USD denominated return time series

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Confidential (C)

Senior loans may benefit a portfolio in periods of rising and falling rates

Average monthly total returns % over 10 years ended 31 Dec 2023 during rising and declining rate months



	Global Bonds	Global Corporates	US Treasuries	Emerging Markets	Senior Loans	Global High Yield
Effective Duration (years)	6.70	6.07	6.18	6.76	**0.25**	3.63
Correlation to 10-year US treasuries	0.88	0.71	0.99	0.40	**-0.15**	0.16

The 10-year yield, represented in this exhibit by the Bloomberg U.S. Treasury Bellwethers 10 Yr. Index, is often used as a proxy for mortgage rates and is also seen as a sign of investor sentiment about the economy.

The chart does not represent the past performance or yield of any Nuveen fund. For fund performance information, visit nuveen.com.

Data source: Morningstar Direct, Bloomberg , JP Morgan Markets. 01 Jan 2014 - 31 Dec 2023. **Past performance does not predict or guarantee future results**. Rising rate months are defined as all months when the 10-year Treasury price return was negative and declining rate months are defined as all months when the 10-year Treasury price return was positive.. Price return is calculated by subtracting the monthly yield from the total monthly return. Returns assume reinvestment of dividends and capital gains but does not reflect transaction costs or taxes. **Representative indexes: Global Bonds:** Bloomberg Global Aggregate Bond Index; **Global Corporates:** Bloomberg Global Aggregate Corporate Bond Index**; High yield:** Bloomberg Global High Yield Index; **Emerging Markets:** JP Morgan EMBI Global Diversified Index; **Senior loans:** Credit Suisse Leveraged Loan Index; **U.S. Treasuries:** Bloomberg U.S. Treasury Index.

Different benchmarks, economic periods, methodologies and market conditions will produce different results. There is no assurance that any asset class or index will provide positive performance over time. **It is not possible to invest directly in an index.**

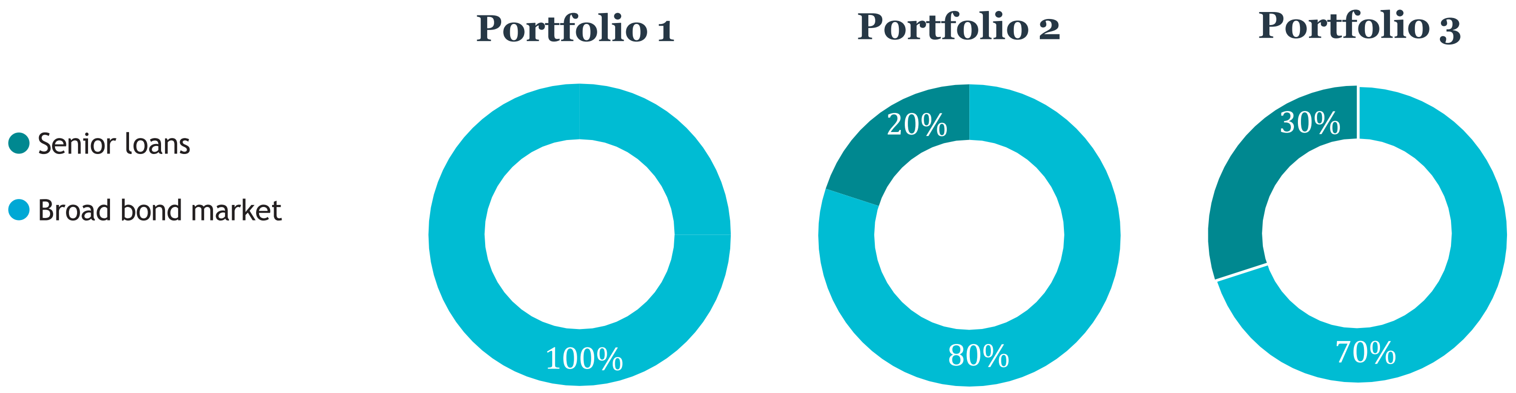
FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Diversifying fixed income allocations with senior loans

Hypothetical allocations to senior loans may offer higher yields and lower duration potential to mitigate interest rate risk

Average yields & durations of blended broad bond market/senior loan portfolios

As of 31 Dec 2023



	Portfolio 1	Portfolio 2	Portfolio 3
Average yield to worst	3.51%	4.61%	5.16%
Average duration (yrs)	6.64	5.32	4.67

The hypothetical allocations are for illustrative purposes only and are not a recommendation to buy or sell any specific securities and should not be considered investment advice of any kind. **Representative indexes: Broad bond market:** Bloomberg Global Aggregate Bond Index; **Senior loans:** Credit Suisse Leveraged Loan Index. **It is not possible to invest directly in an index.**

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Confidential (C)

Appendix

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Nuveen Senior Loan ESG strategy – overview

The Senior Loan ESG strategy seeks to generate favorable long-term risk adjusted returns while intentionally allocating capital to a higher standard for ESG and transparency factors based on the team's proprietary ESG framework.

Focus on capital preservation and income

- Active approach: downside risk mitigation and proactive management of credit risk to uncover total-return opportunities within liquid issuers
- Bottom-up: fundamental company research along with relative value analysis informs issue selection and position sizing
- Top-down: sector and quality rotation informed by top-down insights
- Proprietary ESG scoring and transparency rating framework are fully integrated into the research process
- Carry is expected to be main driver of return with opportunistic investment in total return opportunities

Portfolio management

Scott Caraher | *24 years industry experience*

Coale Mechlin | *10 years industry experience*

Parameters[1]	Expected range (risk limit)
ESG Score[2] *5 = best; 1 = worst*	3 and above – 85% to 100%
Transparency Rating[2] *A = best; F = worst*	C and above – 85% to 100%
Asset allocation	90% to 100% loans (Minimum 80% loans)
Geographic concentration	80-100% USD-denominated (Non-U.S. max 20%)
Credit quality concentration	B or above – 90% to 100% CCC or below – 0% to 10% (max 15%)
Industry/issuer concentration	5% to 20% per industry (max 25%) 1% to 5% per issuer (max 5%)

Risk management

- Downside analysis is conducted for every holding and aggregate portfolio subject to various scenario stress testing
- Portfolio invests in actively traded names to ensure appropriate liquidity

1 Expected range at time of purchase

2 Nuveen Leveraged Finance internal rating. ESG score is a on scale of 1-5, 5 being the best and 1 being the worst, transparency rating is on a scale of A-F, A being the best and F being the worst.

In addition to the strategy parameters above, Nuveen has the ability to customize loan portfolios at the client's request.

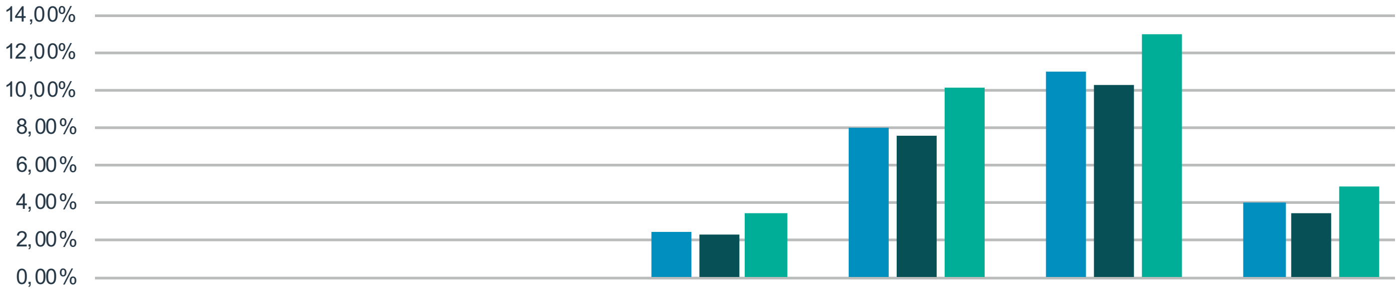
The expected ranges and risk limits may change over time dependent upon market environment and are subject to any investment guideline restrictions.

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Senior Loan ESG – performance

As of 30 Sep 2023

Average annualized total returns (%)



	Inception Date	QTD	YTD	1 Year	Since Inception
Senior Loan ESG (gross)	01 Apr 2021	2.55	8.07	11.02	4.13
Senior Loan ESG (net)	01 Apr 2021	2.40	7.61	10.38	3.53
Morningstar LSTA US Leveraged Loan Index		3.46	10.16	13.05	5.00

IPM-3164002CF-Q0923X

Performance data shown represents past performance and does not predict or guarantee future results. Performance shown is based on the composite. The value of the portfolio will fluctuate based on the value of the underlying securities. Individual returns may vary based on factors such as the account type, market value, cash flows and fees. Current performance is preliminary and may be higher or lower than the performance shown. Final numbers are available upon request. Total returns for a period of less than one year are cumulative.

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Biographies

Tony Appiah, CFA

Client Portfolio Manager

Tony Appiah is a Managing Director and Client Portfolio Manager for Nuveen Equities & Fixed Income. In this role, he serves as an extension of the portfolio management team in articulating NEFI's capabilities and investment views to European clients.

Prior to joining Nuveen in 2022, Tony spent seven years at UBS, five in the firm's global wealth management business as lead funds analyst for taxable fixed income and two years as head of UK fixed income specialists within the asset management business. Prior to joining UBS, Tony worked at Brown Brothers Harriman Private Bank where he oversaw the firm's platform of private and public credit strategies. Tony began his career at Clearbrook Global Advisors in Stamford, Connecticut as an investment analyst.

Tony graduated with a B.A. in Mathematical Economics and a minor in Applied Mathematics from Colgate University. He is also a CFA Charterholder.

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Senior Loan ESG Carve-Out — results explanation

Year	Carve-out Composite Assets Calendar year total return (gross of fees) (%)	Carve-out Composite Assets Calendar year total return (net of fees) (%)	Benchmark return (%)	Carve-out Composite 3-year standard deviation (%)	Benchmark 3-year standard deviation (%)	Number of accounts	Carve-out composite internal dispersion (%)	Carve-outs as a % of composite assets**	Carve-out composite assets at period end ($ millions)	Firm assets at period end ($ billions)
2022	-0.46	-1.04	-0.77	N/A	N/A	</= 5	N/A	100	104.0	556.7
2021*	2.87	2.42	3.36	N/A	N/A	</= 5	N/A	100	103.9	673.1

Current benchmark: Morningstar LSTA US Leveraged Loan Index

* Partial period starting 01 Apr 2021

** Represents the percentage of the composite that is composed of carve-outs with allocated cash

1 TIAA Investments claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS Standards. TIAA Investments has been independently verified for the period 01 Jan 2008 through 31 Dec 2020 by ACA Performance Services, LLC. The verification reports are available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report.

2 TIAA Investments ("TIAAI") is an asset management division that provides investment advice and portfolio management services to the TIAA-CREF group of companies through Teachers Insurance and Annuity Association ("TIAA") and the following registered investment advisers: Teachers Advisors, LLC ("TAL") and TIAA-CREF Investment Management, LLC ("TCIM"). Both registered investment advisers are wholly-owned subsidiaries of TIAA. TIAAI is an affiliate of Nuveen, the investment management arm of TIAA and was created in 2017 as a result of reorganization within TIAA.

3 The underlying portfolio of the Senior Loan ESG Carve-Out composite includes one carve-out in accordance with GIPS composite construction standards. There is no guarantee that the composite performance will be achieved in the future or that an investment in the strategy will not result in losses. The Composite consists of a single account that uses a carve-out and has an allocated cash target of 2.5%. Cash and cash returns are allocated to the portfolio monthly based on beginning of month values and the composite assets include 100% of carve-out assets. The beginning-of-period cash allocation policy was used to allocate cash to carve-outs using a target cash percentage of 2.5%. This target 2.5% cash balance was derived based on actual traded cash reports and is the expected cash balance of a typical portfolio in this strategy. Performance of the total individual portfolio is available promptly on request.

4 The carve-out composite includes portfolios which seek high current income and, when consistent with its primary objective, it seeks capital appreciation. The portfolios comprising the Composite invest primarily in a diversified portfolio of primarily speculative grade senior secured first lien and second lien leveraged loans. The portfolios bring together external ESG ratings with Nuveen's leveraged finance team's proprietary internal rating framework to identify ESG leaders from the leveraged loan universe.

5 Composite internal dispersion is calculated using the asset-weighted standard deviation of the annual gross returns of all portfolios included in the composite for the entire year. Dispersion is not presented for periods where there are five or fewer accounts included in the composite for the full year as it is not considered statistically meaningful.

6 The carve-out composite inception date is 01 Apr 2021; the carve-out composite creation date is Nov 2023.

FOR FINANCIAL PROFESSIONAL USE ONLY. NOT FOR PUBLIC DISTRIBUTION AND NOT FOR USE BY RETAIL INVESTORS.

Disclosures

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Financial professionals should independently evaluate the risks associated with products or services and exercise independent judgment with respect to their clients.

Such information may change without notice. Nuveen manages other strategies and products that are not discussed herein; this presentation is limited to discussing those that exemplify the investment management capabilities of Nuveen for the purposes of this presentation. Certain information was obtained from sources that Nuveen believes to be reliable; however, there is no guarantee of its accuracy.

CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

The portfolios described herein are dynamic and may change over time. Use of the investment process tools and techniques described herein is no guarantee of investment success or positive performance.

There is no guarantee that any other product or account using the specific strategy will achieve such performance.

These materials are provided solely for use in private meetings and are intended for informational and discussion purposes only. These materials are only for use by the intended party and may only be circulated only to persons whom they may lawfully be distributed. Persons who do not fall within such descriptions may not act upon the information contained in these materials. Any entity responsible for forwarding this material to other parties takes responsibility for ensuring compliance with local laws, and in particular any applicable financial promotion rules.

The information presented in these materials is believed to be materially correct as at the date hereof, but no representation or warranty (express or implied) is made as to the accuracy or completeness of any of this information. Data was taken from sources deemed reliable, but cannot guarantee its accuracy. The statements contained herein reflect opinions as of the date written and are subject to change without further notice. Nothing set out in these materials is or shall be relied upon as a promise or representation as to the past or future.

This document is not a prospectus and does not constitute an offer to the public. No public offering or advertising of investment services or securities is intended to have taken effect through the provision of these materials. It is not intended to provide specific investment advice including, without limitation, investment, financial, legal, accounting or tax advice, or to make any recommendations about suitability for any particular investor.

IPP-3389187PF-O1223X

Important Disclosures

These materials are provided solely for use in private meetings and are intended for informational and discussion purposes only. These materials are only for use by the intended party and may only be circulated only to persons whom they may lawfully be distributed. Persons who do not fall within such descriptions may not act upon the information contained in these materials. Any entity responsible for forwarding this material to other parties takes responsibility for ensuring compliance with local laws, and in particular any applicable financial promotion rules.

The information presented in these materials is believed to be materially correct as at the date hereof, but no representation or warranty (express or implied) is made as to the accuracy or completeness of any of this information. Data was taken from sources deemed reliable, but cannot guarantee its accuracy. The statements contained herein reflect opinions as of the date written and are subject to change without further notice. Nothing set out in these materials is or shall be relied upon as a promise or representation as to the past or future.

This document is not a prospectus and does not constitute an offer to the public. No public offering or advertising of investment services or securities is intended to have taken effect through the provision of these materials. It is not intended to provide specific investment advice including, without limitation, investment, financial, legal, accounting or tax advice, or to make any recommendations about suitability for any particular investor.

Notice to persons in the European Economic Area: Issued by the offices and branches of Nuveen Alternatives Europe Sarl (reg. no. A00002440) or Nuveen Asset Management Europe Sarl (reg. no. P00000482), incorporated and registered in Luxembourg with registered office at 4A Rue Henri M Schnadt – 2530 Luxembourg; Both of which are authorised by the Commission de Surveillance des Services Financiers to provide investment products and services. Please note that branches of Nuveen Alternatives Europe Sarl or Nuveen Asset Management Europe Sarl are subject to limited regulatory supervision by the responsible financial regulator in the country of the branch. Telephone calls may be recorded and monitored.

These materials are solely for use with professional investors as defined by Annex II of EU Directive 2017/65/EU (the MiFID II directive).