Public Investment Manager Panel

Investment Challenge Program 2024 Annual Conference Nashville, TN



Panel Moderator

Eric Davis, CFA
Director, Corporate Investments, TVA





Agenda

Investment Manger Presentations

- AllSpring Global Investments Scott Eldridge, Portfolio Manager
- MacKay Shields Joseph Maietta, Managing Director
- Parametric Portfolio Associates Heather Wolf, Portfolio Manager
- Q&A

Submit questions using PollEV – QR code on back of name badge



INVESTMENT MANAGER PRESENTATIONS

Presentation Order:

- AllSpring Global Investments
- MacKay Shields
- Parametric Portfolio Associates



AllSpring Global Investments

Scott Eldridge, CFA Senior Portfolio Manager





2024 Investment Challenge



MARKETING COMMUNICATION

Tennessee Valley Authority (TVA)

Presented by:

Scott Eldridge, CFA - Portfolio Manager, Closed-End Fund Strategies

April 3, 2024



What is a closed-end fund?

Differences between open-end mutual funds and closed-end funds

Same Theoretical Portfolio

<u>Investment</u>	# Shares	Share Price	Market Value
Cash			\$1,000,000
Stock A	1,000,000	\$25	\$25,000,000
Stock B	500,000	\$30	\$15,000,000
Stock C	750,000	\$40	\$30,000,000
Fund Net Asset Value (NAV)			\$71,000,000
		Shares O/S	6,000,000
		NAV/ Sh	\$11.83





Key Structural Differences

OPEN-END MUTUAL FUNDS

Ongoing share issuance	Buy/redeem shares through fund manager
Net asset value	Total net assets of fund divided by # of shares outstanding
Capital structure	Continual issuance based on investor demand
Valuation	Next-day price determined at the market close
Price	Pricing = NAV

CLOSED-END FUNDS

IPO allocation	Buy/sell shares listed on an exchange
Net asset value	Total net assets of fund divided by # of shares outstanding
Capital structure	Fixed number of shares
Valuation	Live pricing throughout the trading day
Price	Price ≠ NAV (at a discount or premium to NAV, depending on market sentiment)

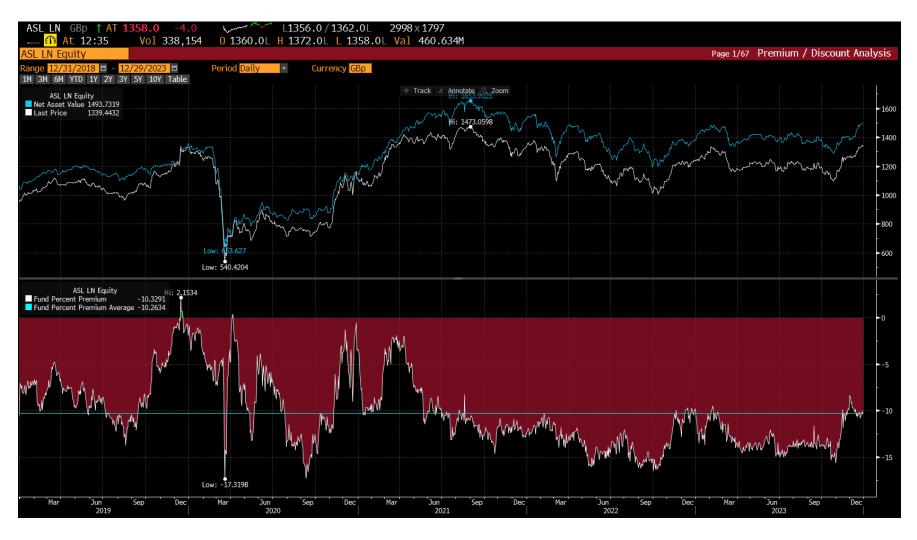
Source: Allspring

For illustrative purposes only.



Premium/discount volatility

Mean reversion presents trading opportunity – Example shown: Aberforth Smaller Companies Trust



For illustrative purposes only. The information shown is not intended to be, nor should it be construed to be, a recommendation to buy or sell an individual security. Source: Bloomberg as of December 29, 2023.



Closed-end fund market profile

Highly inefficient market with consistent arbitrage opportunities

- · Limited Wall Street research coverage
- Few competitors
- · Retail nature of CEF investors driven by fear and greed
- Capacity constrained strategy
- · Trading the discount basis

Universe of international closed-end funds – Capitalizing on unclaimed shareholder value

ASSET CLASS	MARKET CAP \$B
U.S. listed international	\$107.9
UK trusts and offshore	+153.4
Net assets	261.3
Total market capitalization	-233.0
Discount value	\$28.3



Investment team



SCOTT ELDRIDGE, CFA

Senior Portfolio Manager, Closed-End Fund Strategies

Scott Eldridge is a senior portfolio manager for the Closed-End Fund Strategies team at Allspring Global Investments. He joined Allspring from its predecessor firm, Wells Fargo Asset Management (WFAM). Scott joined WFAM from Invesco PowerShares, where he served as director of fixed income product strategy. Prior to that, he was a director of portfolio management at Caprin Asset Management. Earlier in his career, Scott held positions in credit research, trading, and portfolio management at Tattersall Advisory Group as well as various commercial banking roles at Wachovia Bank. Scott earned a bachelor's degree in business administration with an emphasis in finance and economics from the University of Richmond. He has earned the right to use the Chartered Financial Analyst® (CFA®) designation.



Disclosure

Unlike an open-end mutual fund, a closed-end fund offers a fixed number of shares for sale. After the initial public offering, shares are bought and sold through broker-dealers in the secondary marketplace, and the market price of the shares is determined by supply and demand, not by net asset value (NAV), and is often lower than the NAV. A closed-end fund is not required to buy its shares back from investors upon request.

This material is for general information and educational purposes only and is NOT intended to provide investment advice or a recommendation of any kind—including a recommendation for any specific investment, strategy, or plan.

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MacKay Shields

Joseph Maietta, CFA Managing Director





TVA INVESTMENT CHALLENGE PROGRAM AN INTRODUCTION TO HIGH YIELD BONDS

APRIL 3, 2024

JOSEPH A MAIETTA, CFA

Managing Director High Yield Team



What is a "High Yield" Bond?



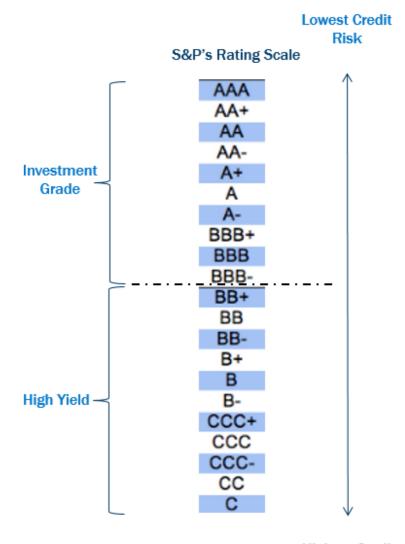
Ahigh yield bond is a corporate debt security issued by a company that has a lower than investment grade credit rating.

This includes bonds that have an original issue high yield credit rating and also "fallen angels", which are bonds that were originally investment grade that have "fallen" (downgraded) into the high yield market.

High yield bonds are considered to have greater credit risk than investment grade bonds, and as a result, investors demand a higher spread to buy these bonds.

High yield bonds are utilized by issuers as a source of capital for various reasons, including:

- Refinancing bonds that are maturing
- General corporate purposes or working capital
- Mergers and/or acquisitions



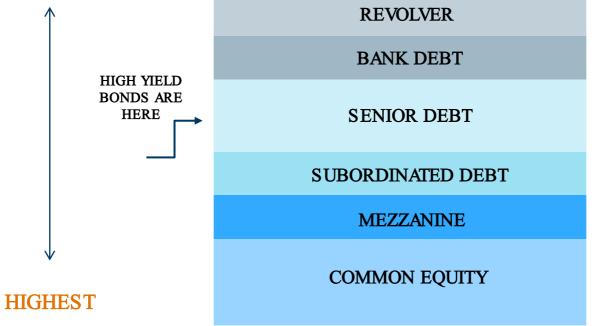
Highest Credit Risk

What is a "High Yield" Bond?

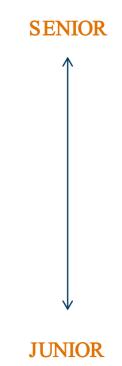


Relative Risk

LOWEST



Position in Capital Structure



What Types of Companies Issue High Yield Bonds?

































How are High Yield Bonds Analyzed?



High Yield bond investors will typically focus on the following key areas:

Business Risk

- Industry and competitor analysis
- Market position
- Size of company, strategic nature of company

Financial Risk

- Free cash flow, stability of cash flow, liquidity
- Earnings trends, leverage
- Asset coverage

Management Assessment

- Experience and quality of management
- Track record of management through cycles
- Interest alignment with debt holders

Capital Structure and Covenants

- Seniority in capital structure
- Ability of company to issue additional debt
- Covenant structures and protections

How are High Yield Bonds Traded?



High yield bonds are traded in the over-the-counter (OTC) market

- High yield bonds are not traded on an exchange (like equities) but by market participants that negotiate a transaction on an individual basis typically by phone or by Bloomberg.
- An asset manager will have dedicated traders that transact with "sell-side" participants who act as agents between buyers and sellers of a particular bond.
- Transparency in the trading of high yield bonds has improved due to TRACE



How are High Yield Bonds Traded?

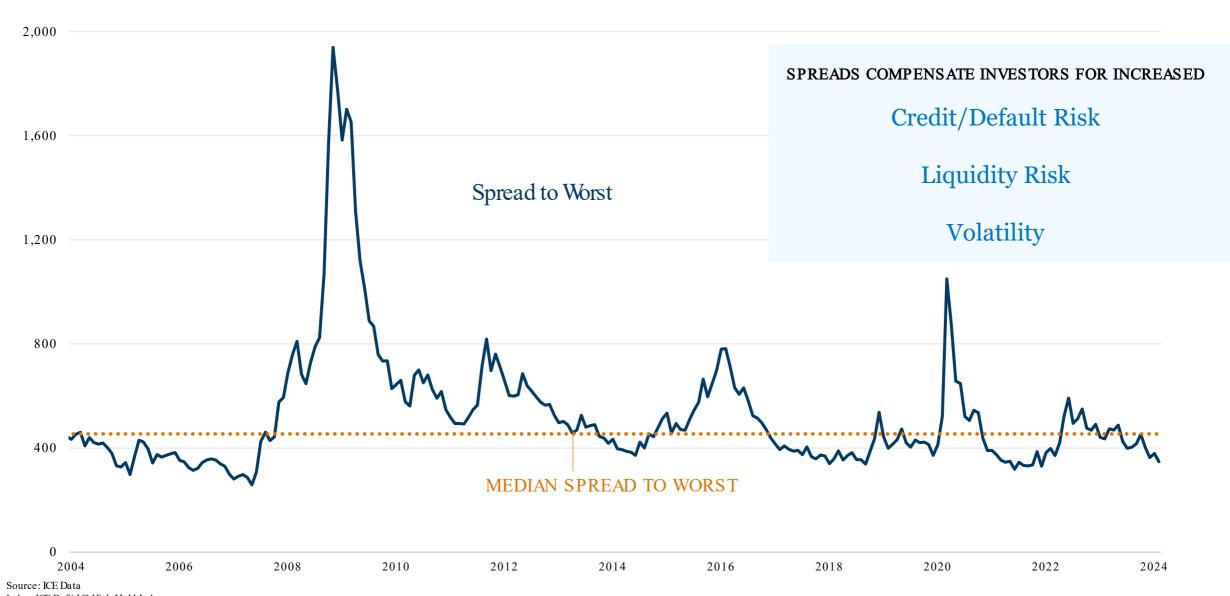


Trade Reporting And Compliance Engine



What are High Yield Bond Spreads?



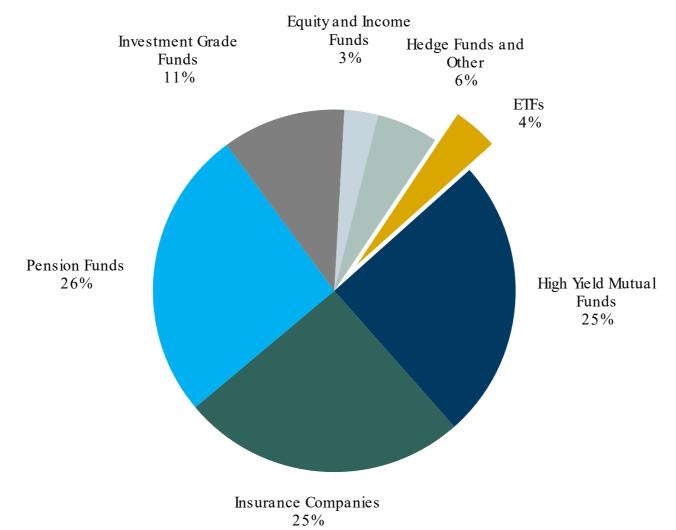


Index: ICE BofAUS High Yield Index As of February 29, 2024

Who Buys High Yield Bonds?

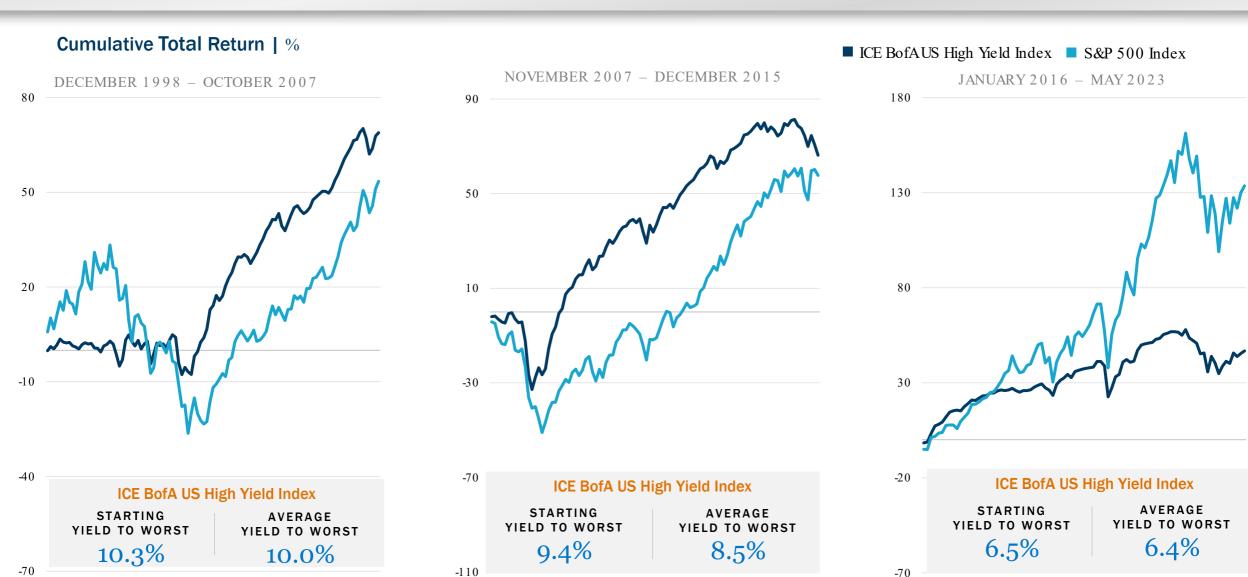


High Yield Investor Base 2023



But, How Does High Yield Perform vs. Equities?





Dec-98 As of May 31, 2023.

Source: MacKay Shields utilizing Bloomberg data. It is not possible to invest directly into an index. Please see disclosures at the end of this presentation for important benchmark information, including disclosures related to comparisons to an index and index descriptions.

Nov-09

Nov-11

Nov-13

Nov-15

Jan-16

Jun-18

Nov-07

Past performance is not indicative of future performance.

Nov-01

Oct-04

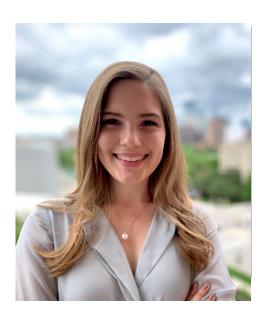
Sep-07

Apr-23

Nov-20

Parametric Portfolio Associates

Heather Wolf, CFA Portfolio Manager







TVA Investment Challenge Program
Conference

April 2024

Characteristics of Derivatives

Derived Value

They derive their value from the value of other, more basic, underlying variables. E.g. the price movement of a stock, or the amount of snowfall at a certain ski resort

Termed Contracts

Derivatives expire or settle on a particular date, if you want to continue the exposure after that date you must enter a new contract

Leveraged Instruments

Derivatives are not fully funded; a portion of the total position (called margin) is posted as collateral on the full position size

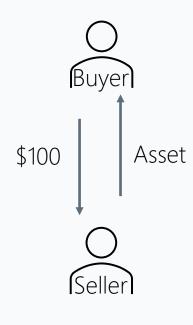
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Financial Transactions Examples

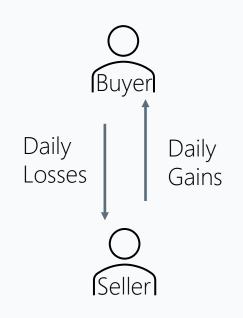
Cash Exchange Instrument

Exchange cash for stock, transaction complete



Futures

No exchange of original value, ongoing daily exchange of performance until expiration



Options

Cash premium exchanged with option to buy/sell at predetermined future price



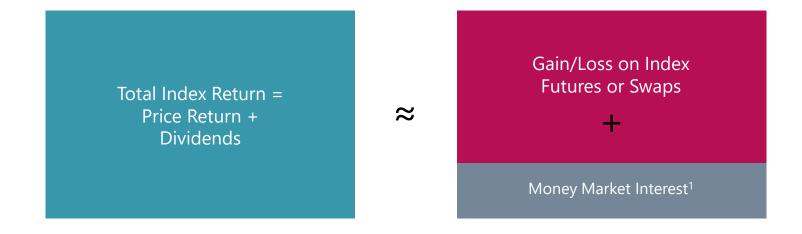
At expiration, buyer chooses to buy/sell at pre-determined price, or do nothing

Opinions offered are the views of Parametric and constitute our judgment Not a recommendation to buy or sell any security. All investments are subject to risk, including risk of loss..



Synthetic Indexing Illustration

Futures or Swaps can provide a return approximately equal to a benchmark index when fully funded.



¹Money market interest may vary depending upon the particular Money Market or STIF investment the client is invested in. For illustrative purposes only. Not a recommendation to buy or sell any security. All investments are subject to risk, including risk of loss.



Margin Example

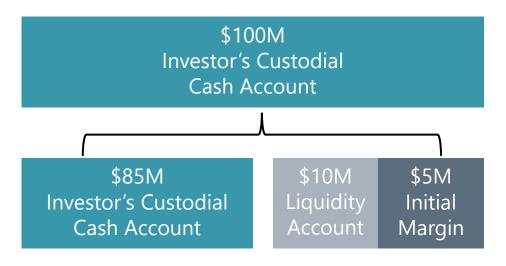
Assumptions:

\$100 million S&P 500® overlay 5% Initial Margin Requirement¹ 10.0% to Custodial Account

Current Cash Structure: Single cash account holding \$100mm

New Cash Structure: Two cash accounts, existing custodial account with \$85mm liquidity, new futures margin account with \$15mm

New Futures Overlay: Adds market exposure equal to total cash



\$100M Futures Overlay Exposure

Initial Margin Requirement % used was based on S&P 500® future initial margin as of 12/7/2022 rounded to nearest whole number. For illustrative purposes only Not a recommendation to buy or sell any security. All investments are subject to risk, including risk of loss..



Derivatives Applications

Derivatives can be utilized throughout an investment portfolio to solve a variety of needs

Efficient implementation

Flexible exposure management programs tailored to fit specific needs

Solution ideas

- Cash overlay
- Synthetic rebalancing
- Transition exposure
- Custom equity exposures
- Custom fixed income exposures

Return enhancement

Systematic strategies that seek alpha across asset classes

Solution ideas

- Alternative risk premia
- Systematic alpha
- Portable alpha

Risk mitigation

Customizable tools that address and manage specific portfolio risks

Solution ideas

- Tail-risk strategies
- Market and security hedging programs
- · Asset and liability hedging
- Currency management

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Disclosures

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Disclosures continued on next page.



Disclosures continued

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