

Nick Bale, Alex Varady, & Will Ciske

Fixed Income Oros Fund Proposal

Agenda

1	Bonds, ETF Choices, and Tax Considerations
2	Portfolio Allocation and Duration
3	Bond Laddering and Long-Term Strategy
4	Economic Outlook and Investment Risks
5	Final Recommendation

Major Categories of U.S. Bonds

<h3>U.S. Treasury Bonds</h3> <ul style="list-style-type: none">• Issued by the federal government• Not taxable on the state level• Safest kind of bond investment• Backed by U.S. taxing authority	<h3>Municipal Bonds</h3> <ul style="list-style-type: none">• Issued by state, local, and other government entities• Backed by taxing authority or project cash flow• Taxable and non-taxable municipal bonds
<h3>Corporate Bonds</h3> <ul style="list-style-type: none">• Backed by company cash flow• Interest rates vary by credit quality• No tax benefits for holders	<h3>High-Yield Corporate Bonds</h3> <ul style="list-style-type: none">• A subsector of corporate bonds• Bonds with low credit quality• Higher default rates and credit risk• Higher yields

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Tax Considerations for an Endowment Fund

- The endowment fund pays no taxes
- The tax benefits from non-taxable Muni's and UST's do not benefit us
- Bonds with tax benefits are priced accordingly
- The fund would be significantly overpaying if we bought a bond with tax benefits and were not able to benefit from them

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

ETF Choices

- **TIP, iShares TIPS Bond ETF**
 - Treasury Inflation Protected Securities to hedge against inflation
 - The Fed already owns a significant number of TIPS, so prices are artificially high
- **LQDI, iShares Inflation Hedged Corporate Bond ETF**
 - Tracks an index created to offset the inflation risk of investment-grade corporate bonds
- **BAB, Invesco Taxable Municiple Bond ETF**
 - 5.25% Yield
 - Effective Duration 7.9 Years
 - Total Expense Ratio 28 bps

OVERVIEW

POSITIONING

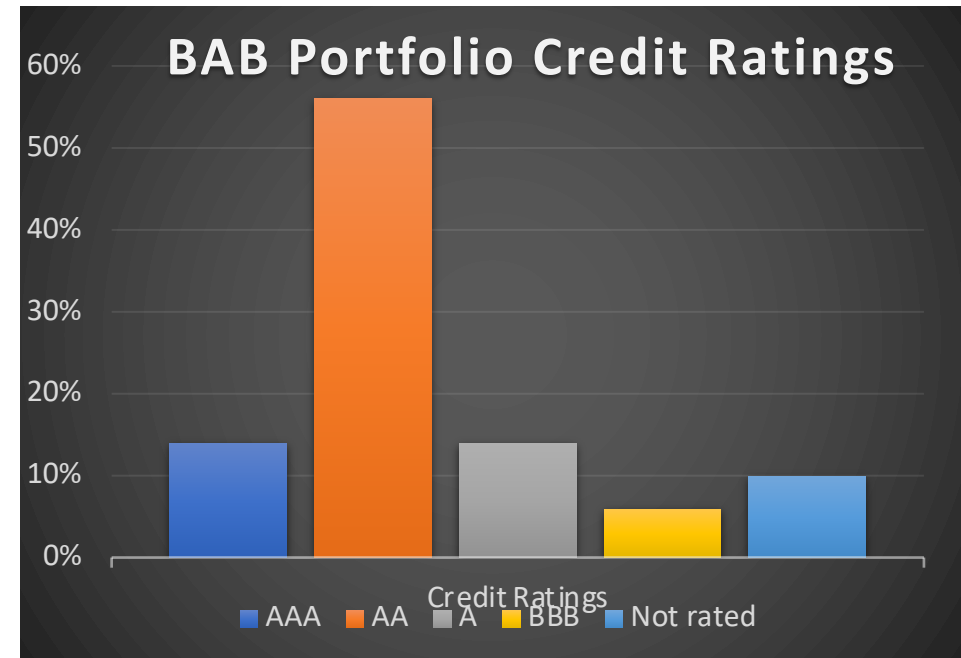
FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

BAB Credit Ratings

- High quality credit
- No high yield bonds
- Backed by local and state taxing authority
- Low Credit/default risk



OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Portfolio Allocation

- Reality Income Corporation (REIT). 350 Shares/ MV: \$22,708.77
- Silver ETF. 617 Shares/ MV: \$12,858.28
- Tips ETF. 325 Shares/ MV: \$31,629
- Cash on Hand: \$53,078
- With \$53,078 in cash, moving to an ETF investment is our best choice with cash on hand

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Duration

- Time in years it will take a bond's cash flows to repay the price an investor paid for the bond
- Tells us how much a bond's price might change when interest rates change
- The higher the duration the more sensitive the price is to interest rate change
- A bond with a duration of 5 will increase or decrease 5% when interest rates change 1%
- Duration of a bond is determined by
 - Interest rate
 - Call features
 - Yield
 - Credit Quality
 - Maturity

OVERVIEW

POSITIONING

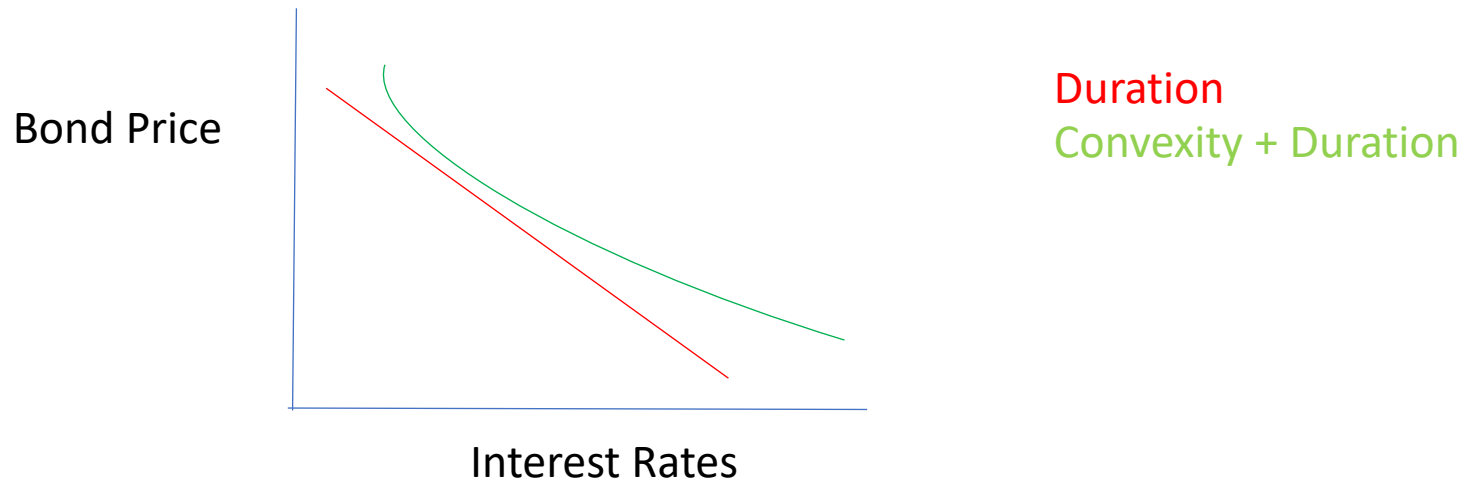
FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Convexity

- Duration assumes that the relationship between interest rates and bond prices are linear
- Convexity demonstrates the curved relationship to give a more accurate representation
- More convexity means greater increases and smaller decreases when interest rates fluctuate by larger amounts



OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Holding Strategy: Bond Laddering vs Holding to Maturity

Bond Laddering: Creating a laddered structure to generate income and attempt to reduce risk in a portfolio with fixed income

- As interest rates rise bond prices fall, however, not all bonds have the same exposure to this risk
- By purchasing bonds with multiple maturity dates, investors can reduce interest rate risk while also earning a favorable yield

Example:

Treasury Note 1: 5 Years to Maturity and 3% Yield

Treasury Note 2: 3 Years to Maturity and 2% Yield

Treasury Bill: 1 Year to Maturity and 1% Yield

Part of the portfolio matures every two years averaging a 2% yield

If interest rates rise, reinvest the principle from the mature bond

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Holding Strategy: Long-Term Outlook Post-Recession

- Largest Holding (BAB)
 - State of California Muni (AA/Aa2 Rating, Weight: 1.56%)
 - City of FT. Lauderdale (AAA/Aa2 Rating, Weight: 1.37%)
 - State of California Muni (AA/Aa2 Rating, Weight: 1.33%)
- Each Investment in BAB has high credit rating
- No High Yield Bonds/Corporate Bonds, Each backed by Local and State taxing authority
- One Bad Holding:
 - Western Michigan University Muni (Rating AA/Aa3 (Should be Junk Bond), Weight 0.16% (Will be 0 soon)). FIRE UP CHIPS

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Economic Outlook

- Interest rates will decline in a recession
- Corporate and high-yield bonds are at risk of higher default rates
- Municipal bonds have a very low default rate
- Yields are the highest in a decade
- A Fed pivot in the next year will mean higher bond prices

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Investment Risks

- Default rates rise within the portfolio
- Interest rates continue to rise
- Inflation is stickier than expected
- The Fed terminal rate is higher than the market currently thinks
- The Fed doesn't pivot and leaves interest rates high

OVERVIEW

POSITIONING

FIXED INCOME
INFORMATION

ECONOMIC
OUTLOOK

RECOMMENDATION

Summary & Final Recommendation

- **The Oros Fund buys \$50,000 of BAB**
- **Take advantage of decade high interest rates**
- **Duration of 7.9 years**
- **Yield of 5.25%**
- **Position into safety ahead of a potential recession**
- **Realize capital gains in the event of a recession**

OVERVIEW

POSITIONING

FINANCIAL
ANALYSIS

ECONOMIC
OUTLOOK

RECOMMENDATION