

***Summit Strategies Group***

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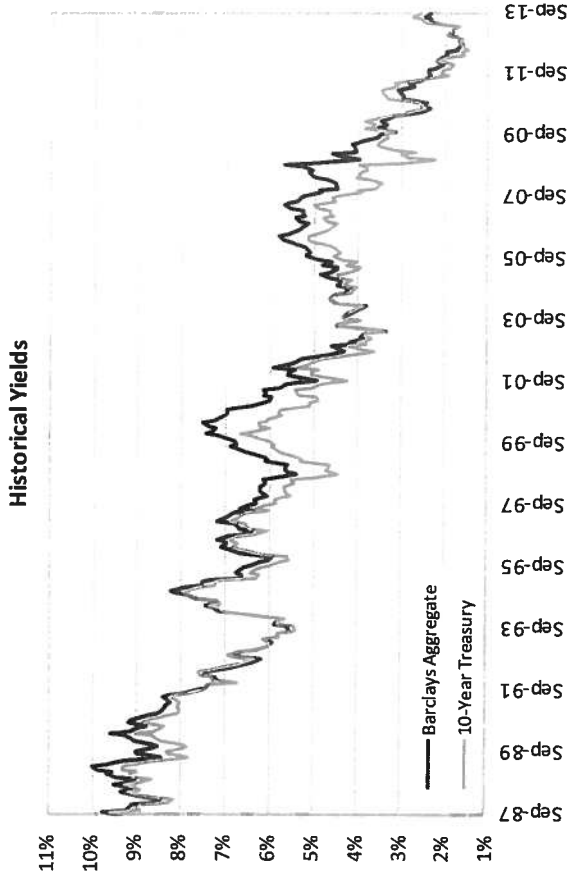
*314.727.7211*

**Fixed Income Update**

**City of Jacksonville Police & Fire  
Pension Fund**

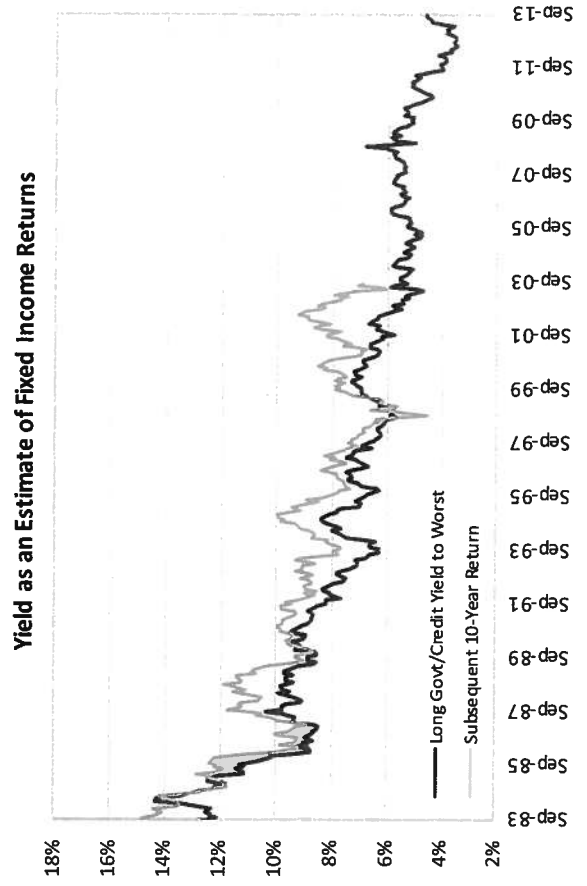
*November 2013*

**INTEREST RATES: THE LAST THIRTY YEARS**



**Rates have fallen for thirty years.**

- When rates fall, bond prices rise.
- Producing substantial returns from bonds.
- Current 10-Yr Yield around 2.6%.



**Future bond returns will be challenged from here.**

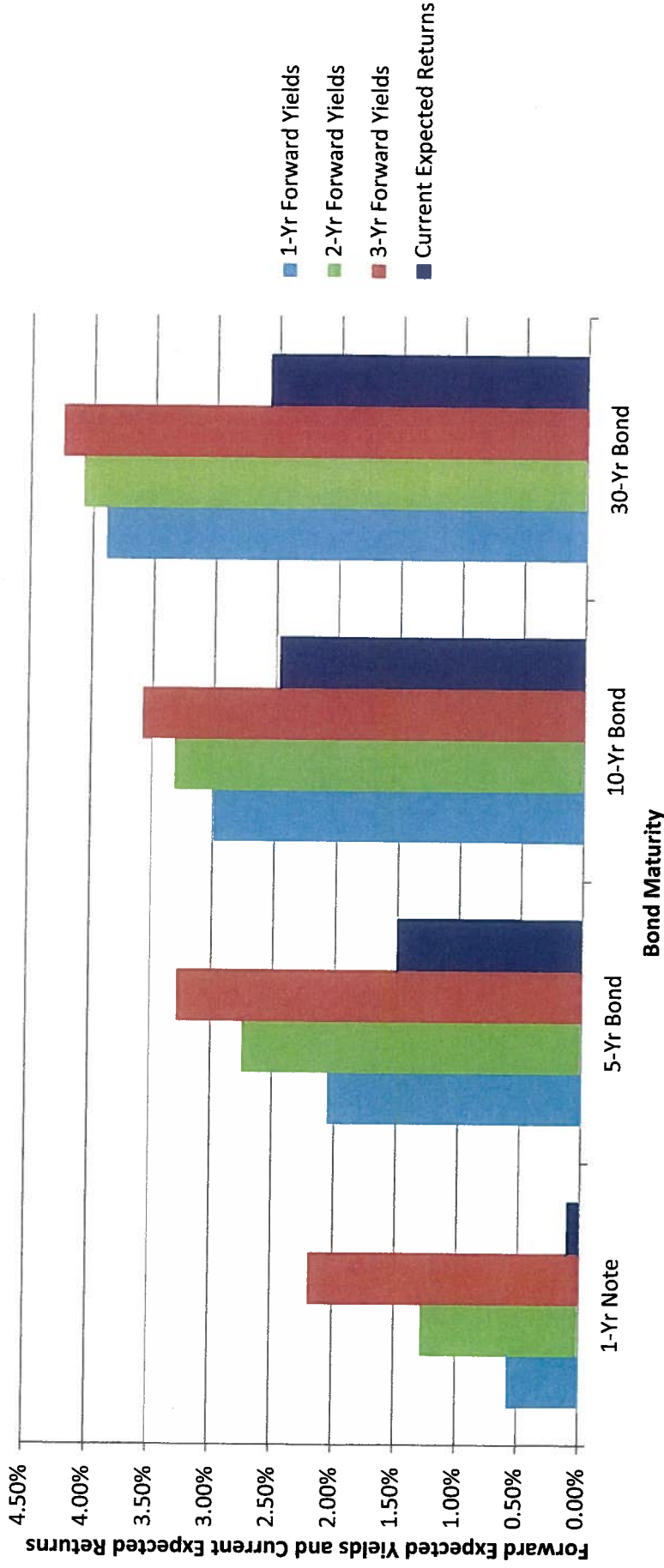
- If rates fall, we are in deflation.
- If rates stay the same, returns will be a little better than coupon.
- If rates rise, returns may be negative.

**INTEREST RATES: WHAT IS THE MARKET PRICING IN?**

**Bond market expectations:**

- Investors believe rates are going to rise.

**Forward Expected Yields versus Current Expected Returns**



**Note:**

The dark blue bars are the expected returns for current 1, 5, 10 and 30-Year maturity bonds. The other bars are the yields the market expects for the various maturities 1, 2 and 3 years from now.

**What does the gap between Current Expected Returns and Forward Yield Expectations mean:**

- If rates increase as expected, you'll earn the Current Expected Return.
- If rates rise faster than anticipated, you'll earn less than the Current Expected Return.

**INTEREST RATES: THE IMPACT OF RISING RATES**

**The definition of Duration:**

- The sensitivity of a bond’s price (Principal) to a change in interest rates.
- The Present Value of Coupon, Yield, Maturity and Call Features.
- Measured in years.

**Note:**

As interest rates fall, bond prices rise. As interest rates rise, bond prices fall – the faster and higher interest rates rise, the larger the impact on bonds.

**Impact on a Fixed Income Portfolio:**

- Duration: 5.5 Years
- Coupon (weighted average): 4.2%
- If rates rise 1%, 2% or 3% (instantaneous)

<u>Duration</u>	<u>x</u>	<u>Parallel Curve Shift</u>	<u>Price Impact</u>	<u>Coupon</u>	<u>Total Price Impact</u>
5.4	x	1.0%	= - 5.4%	+ 4.0%	= -1.4%
5.4	x	2.0%	= - 10.8%	+ 4.0%	= -6.8%
5.4	x	3.0%	= - 16.2%	+ 4.0%	= -12.2%

**INTEREST RATES: WHAT IS THE BOARD DOING?**

**Where the Board should spend its time:**

- Examine the fixed income allocation in conjunction with other asset classes.
  - Can the allocation be changed?
  - When can changes be made?
- Examining alternative investments that behave like bonds but that have less interest rate sensitivity:
  - Such as Unconstrained Fixed Income, Relative Value Hedge Funds, Private Lending, Core Real Estate.
- Assessing the relative valuation of each of the Fixed Income investments.
- Determining to what extent the Board can reasonably hedge interest rate risk within the confines of the Investment Policy Statement and statutes/ordinances while avoiding the risks inherent in market timing.

**POTENTIAL INVESTMENT OPTIONS**

Strategy	Advantages	Disadvantages/Risks
<b>Shorten Duration</b>	Less interest rate sensitivity	Low current income; does not protect against shifts in front part of the curve
<b>Further Diversification</b>	Spreads out risk	Different risks are introduced: credit, currency, etc.
<b>Unconstrained Portfolio</b>	Ability to short duration; ability to opportunistically adjust	Requires new managers, investment guidelines with funds an issue
<b>Relative Value Hedge Funds</b>	Uncorrelated to interest rates	Expected to underperform public debt when spreads tighten, currently not permitted
<b>Private Fixed Income</b>	Expect large number of buyouts to increase upcoming demand and create attractive terms for debt	Less liquid; higher fees; increased credit risk, currently not permitted
<b>Increase Core Real Estate</b>	Attractive income with less interest rate sensitivity	Higher risk and less liquid, cap rates have declined

## City of Jacksonville Police & Fire Pension Fund

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