Summit Strategies Group
8182 Maryland Avenue, 6th Floor
St. Louis, Missouri 63105
314.727.7211

Asset Allocation Review Considering Private Investments and Pension Reduction Bond

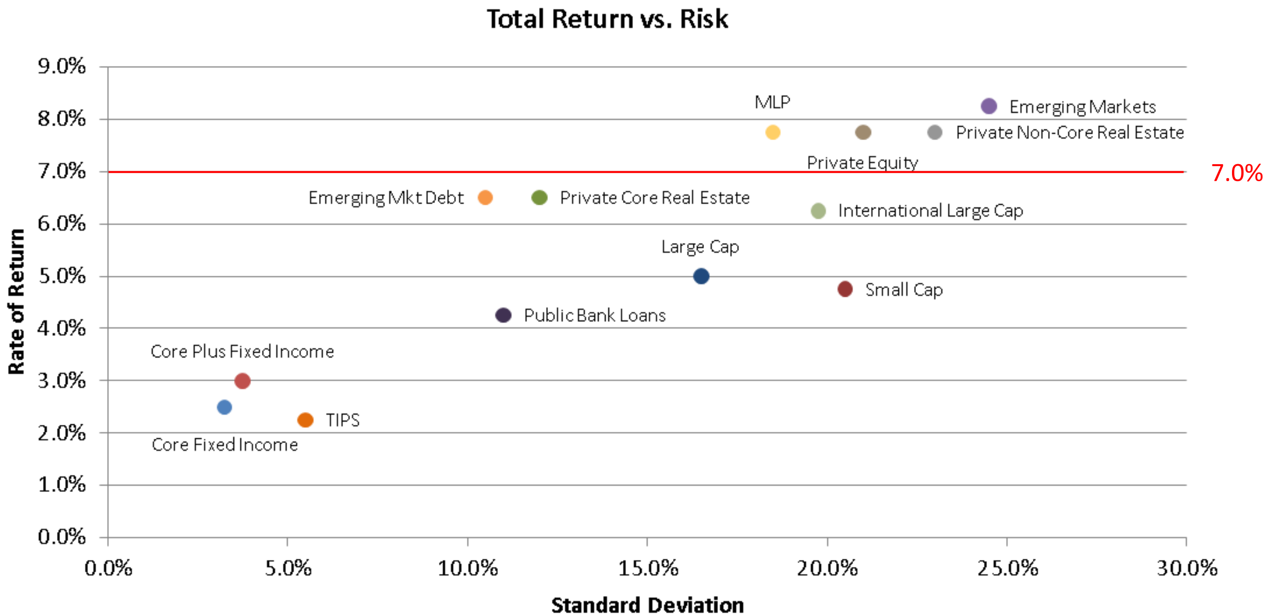
City of Jacksonville
Police & Fire Pension Fund

March 16, 2015

EXECUTIVE SUMMARY

- You have asked Summit to illustrate the effects of changing asset allocation under three scenarios:
  - Private investments, including Private Equity and Private Real Assets/Natural Resources, become permissible for investment.
  - A “pension reduction bond” is issued by the City of Jacksonville to the Jacksonville Police & Fire Pension Plan in lieu of payment of a portion of the unfunded liability. This pension reduction bond would carry a 30-year term to maturity and pay a 5% annual coupon.
  - A combination of both.
- Summit’s capital market assumptions remain low relative to historic average returns. In addition, since the expected return for inflation was reduced from 2.25% to 1.75% (over a 10-year time horizon) earlier this year, the majority of asset classes have also experienced a drop in expected returns.
- Very few asset classes currently have an expected return greater than 7.0%.
- Adding Private Equity or Private Real Assets/Natural Resources raises the expected return to approximately 7.0%. Adding both raises expected return and keeps risk approximately the same.
- Replacing Core Fixed Income with the pension reduction bond with the proceeds added into Domestic Equity improves expected return but increases risk more.
- Replacing a portion of Core Fixed Income with the pension reduction bond with the proceeds added to Private Equity and Real Assets or both increases both expected return and risk.

CAPITAL MARKET ASSUMPTIONS – AS OF DECEMBER 31, 2014



- Summit's capital market assumptions are illustrated to the left and listed below.
- Asset class assumptions are geometric (net of volatility) using a 10-year investment time horizon and are net of fees.
- Today, few asset classes provide an expected return in excess of 7.0%, with the exception of many of the illiquid alternative/private investments.

Asset Class	Expected Return	Expected Alpha	Standard Deviation	Comments Regarding Return Assumptions
Large Cap	5.0%	0.5%	16.5%	Long-term Expected, Fundamental Components
Small Cap	4.8%	0.8%	20.5%	Long-term Expected, Fundamental Components
International Large Cap	6.3%	0.8%	19.8%	Long-term Expected, Fundamental Components
Emerging Markets	8.3%	1.0%	24.5%	Long-term Expected, Fundamental Components
Emerging Mkt Debt	6.5%	0.8%	10.5%	Current Yield Curve + Sovereign Default Discount
Private Non-Core Real Estate	7.8%	n/a	23.0%	Current Cap Rate + NOI Growth + Liquidity Premium + Leverage Adj
MLP	7.8%	n/a	18.5%	Distribution Yield + NOI Growth
Private Equity	7.8%	n/a	21.0%	Base Return (Small Cap) + Liquidity Premium + Leverage Adj
Core Fixed Income	2.5%	0.3%	3.3%	Current Yield Curve
Core Plus Fixed Income	3.0%	0.5%	3.8%	Current Yield Curve
Private Core Real Estate	6.5%	n/a	12.0%	Current Cap Rate + NOI Growth + Leverage Adj
Public Bank Loans	4.3%	n/a	11.0%	Base Return (High Yield)
TIPS	2.3%	n/a	5.5%	Real Yield + Inflation Expectation

CAPITAL MARKET ASSUMPTIONS (CONTINUED)

- The table to the right summarizes changes to Summit's long-term (10-year investment time horizon) strategic capital market assumptions that have occurred since the beginning of the calendar year.
- While these assumptions are long-term by definition (one would not expect them to change frequently), there are times throughout the year when market fundamentals move dramatically, thereby altering the long-term expected performance for certain asset classes.

Asset Class	Expected Return as of 12/31/2013	Expected Return as of 12/31/2014	Difference
Large Cap	5.50%	5.00%	-0.50%
Small Cap	5.25%	4.75%	-0.50%
International Large Cap	6.75%	6.25%	-0.50%
Emerging Markets	8.50%	8.25%	-0.25%
Emerging Mkt Debt	6.75%	6.50%	-0.25%
Private Non-Core Real Estate	8.75%	7.75%	-1.00%
MLP	8.25%	7.75%	-0.50%
Private Equity	9.25%	7.75%	-1.50%
Core Fixed Income	3.50%	2.50%	-1.00%
Core Plus Fixed Income	4.00%	3.00%	-1.00%
Private Core Real Estate	6.75%	6.50%	-0.25%
Public Bank Loans	4.25%	4.25%	0.00%
TIPS	3.25%	2.25%	-1.00%

ASSET CLASS RESTRICTIONS

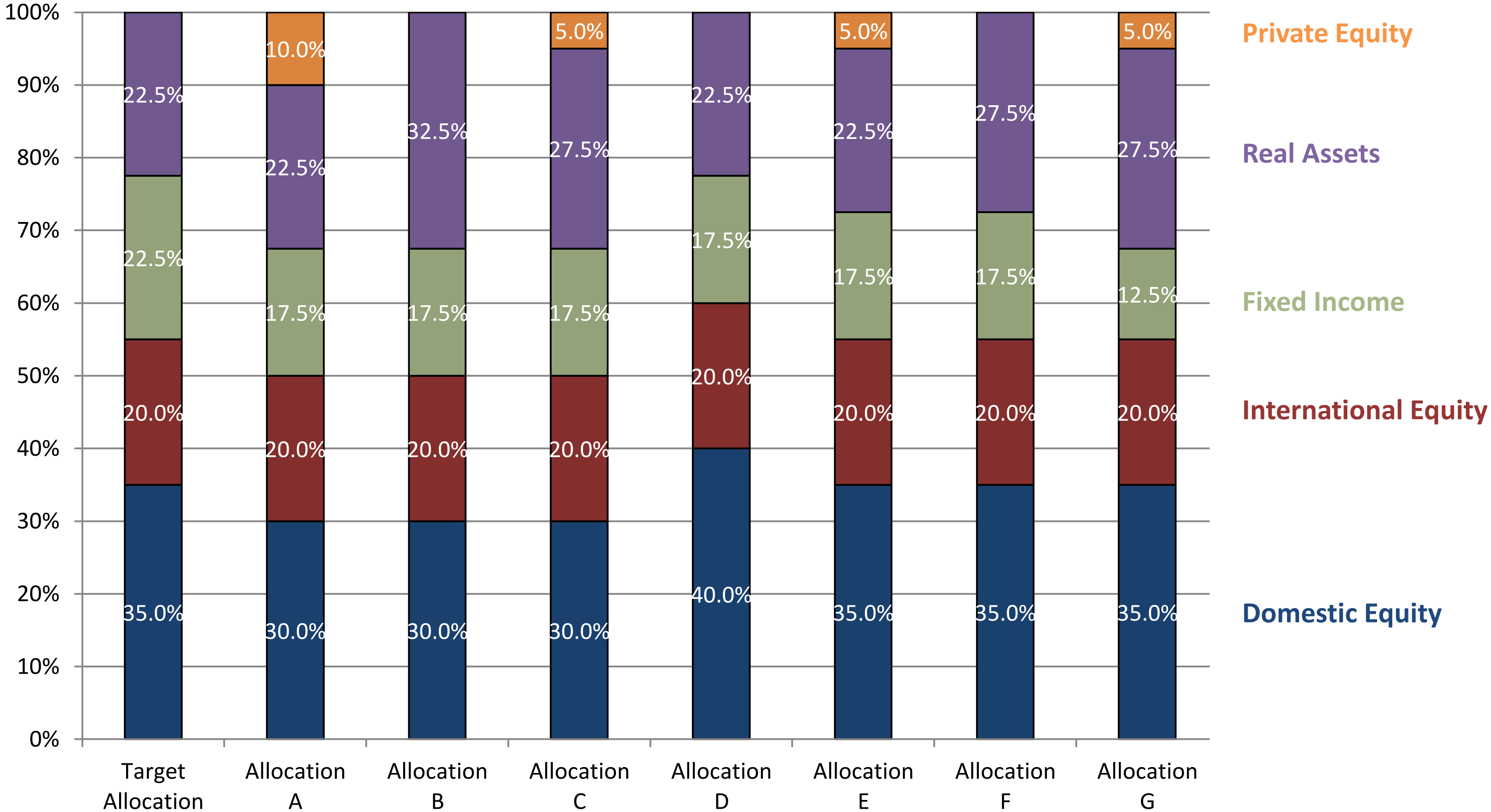
- Florida Statutes outline, especially Chapters 112.661 and 215.47, several restrictions including, but not limited to:
  - No more than 25% of the assets may be allocated toward:
    - Mortgage securities
    - Real property
    - Investment grade fixed income obligations of foreign governments and agencies, foreign corporations, or foreign commercial entities
    - US dollar denominated obligations issued by foreign governments and agencies, foreign corporations, or foreign commercial entities
    - Corporate obligations and securities of any kind of foreign corporations or a foreign commercial entity having its principal office located in any foreign country – not including US dollar denominated securities listed and traded on a US exchange (See note below)
      - Non-US corporate bonds traded outside the US shall be counted toward the 25% limit.
  - No more than 80% of the assets may be allocated to:
    - domestic equity securities listed on nationally recognized exchanges and
    - domestic corporate bonds.
  - No more than 5% in alternative assets (includes private equity, private debt, and hedge funds), if deemed appropriate and subject to other restrictions.
  - Currently, real estate is the only private investment permitted by investment policy and state statutes.
  - ADRs are permissible in domestic equity portfolios but limited to 15% of manager’s portfolio per the investment policy.
- The statutory restrictions are reflected in the investment policy.
- Note: Chapter 215.47 (20) increases the 25% limit on foreign corporate securities to 35% but chapter 112.661 has not been updated to include subsection (20).
- Local ordinances may be passed to provide greater investment flexibility than that which is contained in Chapters 112.661 and 215.47 of Florida Statutes.

CONSIDERATIONS FOR IMPROVEMENT TO ASSET ALLOCATION

- The Target Allocation has a 10-year expected return of 6.6% and standard deviation of 11.2%. The expected return falls short of the actuarially-assumed rate-of-return by approximately 40 basis points.

- On the following slide, the Target Allocation and several alternative allocations are modeled.
- Changes made with respect to the Target Allocation are as follows:
  - **Allocation A:** Domestic Equity is reduced 5.0%, Fixed Income is reduced 5.0%, and a 10.0% allocation to Private Equity is added.
  - **Allocation B:** Domestic Equity is reduced 5.0%, Fixed Income is reduced 5.0%, and Real Assets is increased by 10.0%.
  - **Allocation C:** Domestic Equity is reduced 5.0%, Fixed Income is reduced 5.0%, Real Assets is increased by 5.0%, and a 5.0% allocation to Private Equity is added.
  - **Allocation D:** 5.0% Core Fixed Income is removed, Domestic Equity is increased by 5.0%, and income from the Pension Reduction Bond (PRB) equivalent in size to 5.0% of the portfolio is factored into the expected return.
  - **Allocation E:** 5.0% Core Fixed Income is removed, a 5.0% allocation to Private Equity is added, and income from the Pension Reduction Bond (PRB) equivalent in size to 5.0% of the portfolio is factored into the expected return.
  - **Allocation F:** 5.0% Core Fixed Income is removed, Real Assets is increased by 5.0%, and income from the Pension Reduction Bond (PRB) equivalent in size to 5.0% of the portfolio is factored into the expected return.
  - **Allocation G:** 5.0% Core Fixed Income is removed, Core Plus Fixed Income is reduced by 5.0%, Real Assets is increased by 5.0%, a 5.0% allocation to Private Equity is added, and income from the Pension Reduction Bond (PRB) equivalent in size to 10.0% of the portfolio is factored into the expected return.

ASSET ALLOCATIONS



	Target Allocation	Allocation A	Allocation B	Allocation C	Allocation D	Allocation E	Allocation F	Allocation G
10 Year Expected Return	6.6%	7.0%	6.9%	6.9%	6.9%	6.9%	7.0%	7.5%
Standard Deviation	11.2%	11.8%	10.9%	11.3%	12.0%	12.0%	11.5%	12.3%
Return/Risk	0.59	0.59	0.63	0.61	0.57	0.58	0.61	0.61

DISCUSSION POINTS ON PENSION OBLIGATION BOND

- 5% coupon is double the expected return of Core Fixed Income.

- If held to maturity over 30 years, volatility due to changes in interest rates will be less important. This assumes all coupon payments are timely made.

- Credit risk becomes extremely concentrated in one issuer: the City of Jacksonville. Is this prudent?

- Legal, actuarial, and auditor review required in advance.