

Economic Update and Investment Tips

Presented to:
Ohio Association of Public Treasurers

June 16, 2016



Agenda

- Current economic factors
- Portfolio right-sizing
- Municipal securities
- Brokered CDs
- Step-up agency bonds

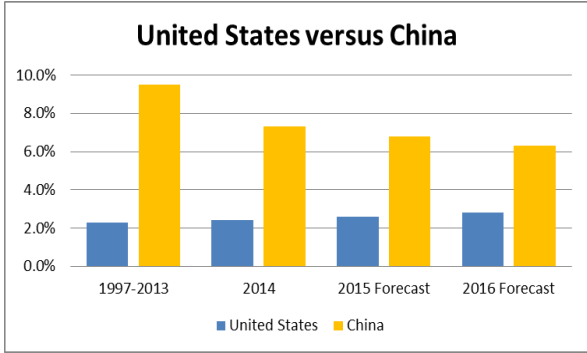
Factors Impacting Investment Opportunities

Market Environment

What will determine when (or if) interest rates will rise again?

- Fed Policy
- Oil
- Global Slowdown Fears

Gross Domestic Product (GDP) >>



Source: International Monetary Fund, World Economic Outlook, October 2015

Shenzhen, 1980s – Pop: 31,000 >>



Shenzhen, 1990s >>



Shenzhen, 2009 - Pop: 10.6 M >>



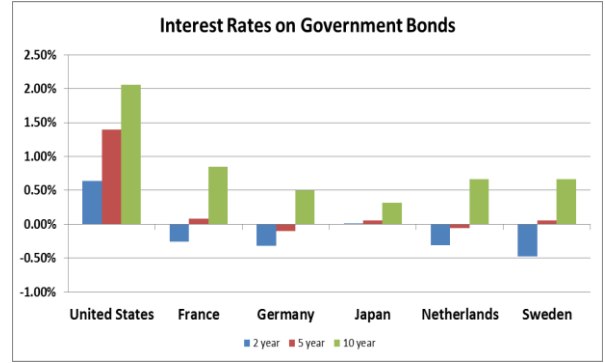
China used more cement in the last three years than the U.S. used in the entire 20th century.



SOURCES: USGS, Cement Statistics 1900-2012; USGS, Mineral Industry of China 1990-2013

Source: Washington Post, 3/24/15

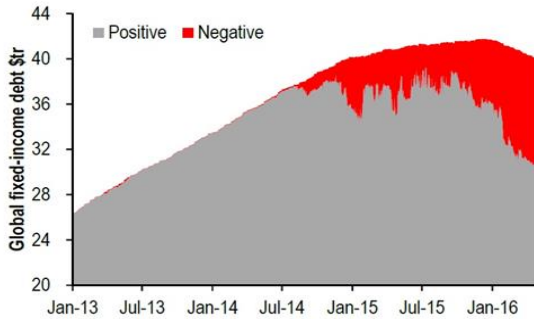
Negative Rates Abroad



Source: Barron's 10/26/15

Negative Rates Abroad

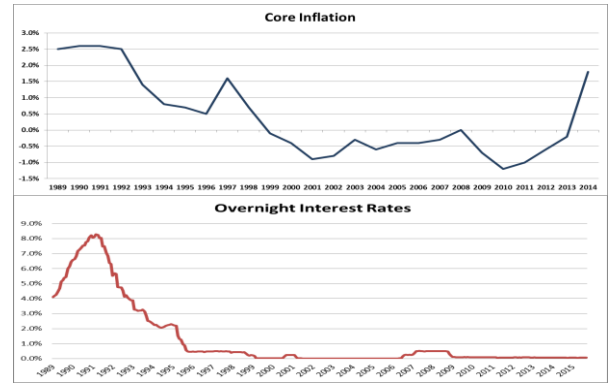
23% of bonds globally yield less than 0%, up from 13% at the beginning of the year



Source: Bank of America-Merrill Lynch (BAML)

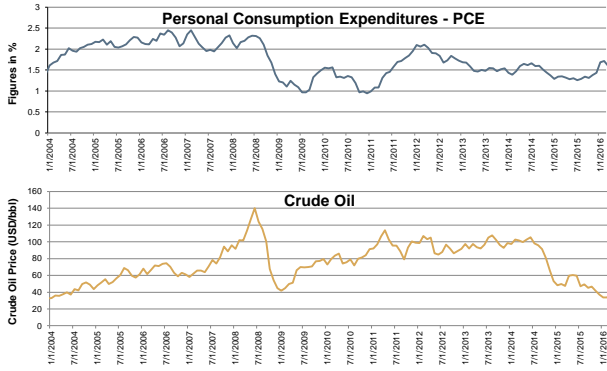
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History of Japan



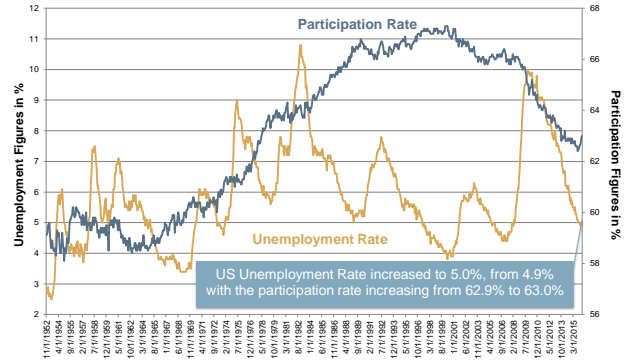
Source: Bank of Japan

Inflation



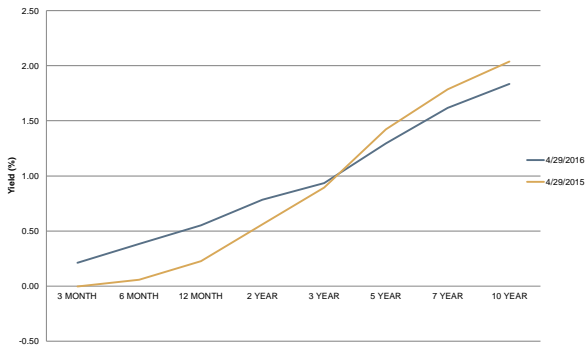
Source: Bloomberg

Unemployment



Source: Bloomberg

U.S. Treasury Yield Curve



Source: Bloomberg

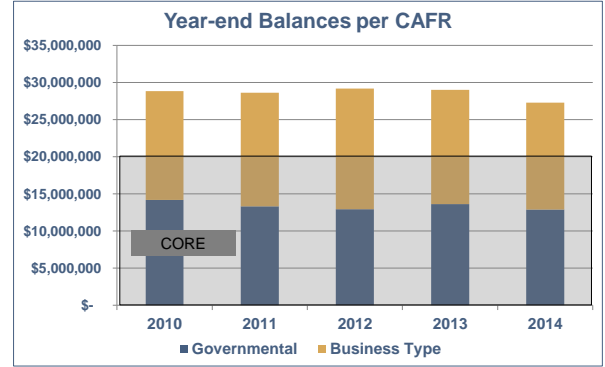
Portfolio Right-Sizing

Cash vs Core vs Project Funds

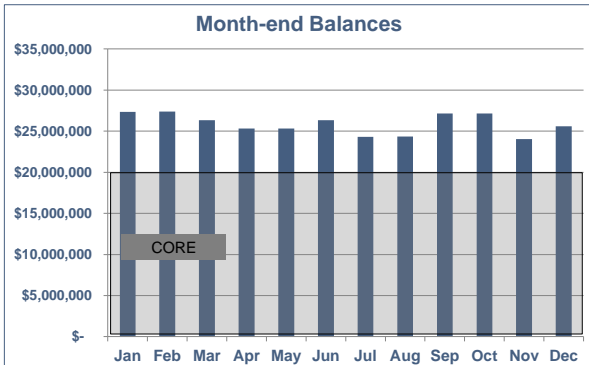
- Cash Management – “Cash” Portfolio
 - › Operating needs for current year
 - › Funds with uncertain time horizon
- Investment Management – “Core” Portfolio
 - › Time horizon greater than one year
 - › Apply investment strategy to maximize earnings
- Project funds – “Project” Portfolio
 - › Defined time horizon
 - › Match investments to anticipated expenditures

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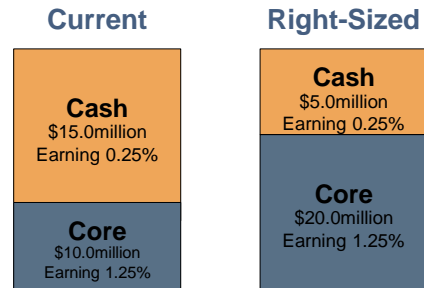
Cash vs. Core



Cash vs. Core



Cash vs. Core

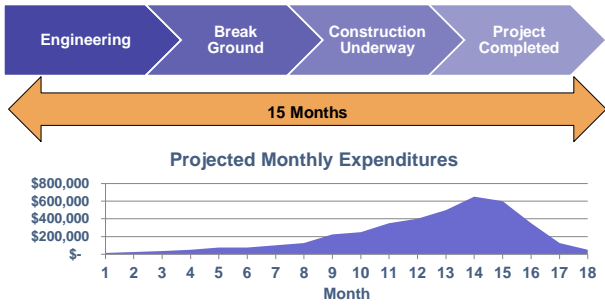


Projected Additional Interest Income of \$100,000

For illustration purposes only.

Project funds

Project Scope and Timeline
\$40 million Building Improvement



Two Examples

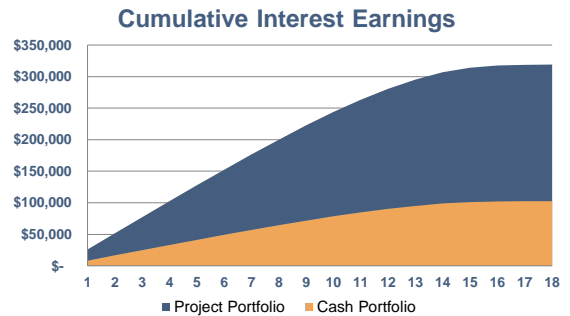
- 1) Invest funds overnight at 0.25%
- 2) Build a portfolio matching investments to projected expenditures

Project Portfolio

	Invested Dollars	Interest Rate
Overnight	\$750,000	0.25%
4-6 months	\$2,000,000	0.50%
7-9 months	\$4,500,000	0.75%
10-12 months	\$10,000,000	0.90%
13-15 months	\$17,500,000	0.75%
16-18 months	\$5,250,000	0.80%
TOTAL	\$40,000,000	

For illustration purposes only.

Cash vs Project Portfolio



Projected Additional Interest Income of \$200,000

For illustration purposes only.

Municipal Securities

Municipal Securities

Ohio Revised Code 135.14

(4) Bonds and other obligations of this state, or the political subdivisions of this state, provided that, with respect to bonds or other obligations of political subdivisions, all of the following apply:

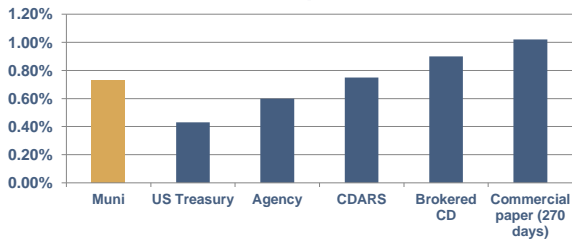
- (a) The bonds or other obligations are payable from general revenues of the political subdivision and backed by the full faith and credit of the political subdivision.
- (b) The bonds or other obligations are rated at the time of purchase in the three highest classifications established by at least one nationally recognized standard rating service and purchased through a registered securities broker or dealer.
- (c) The aggregate value of the bonds or other obligations does not exceed twenty per cent of interim moneys available for investment at the time of purchase.
- (d) The treasurer or governing board is not the sole purchaser of the bonds or other obligations at original issuance.

No investment shall be made under division (B)(4) of this section unless the treasurer or governing board has completed additional training for making the investments authorized by division (B)(4) of this section. The type and amount of additional training shall be approved by the treasurer of state and may be conducted by or provided under the supervision of the treasurer of state.

Municipal Securities Tax Exempt Issue

City of Avon Water System Revenue Bonds 1.25% 2/2/17
Priced 1/20/16 to yield 0.73%

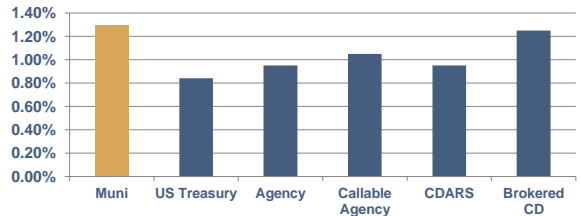
Rate Comparison



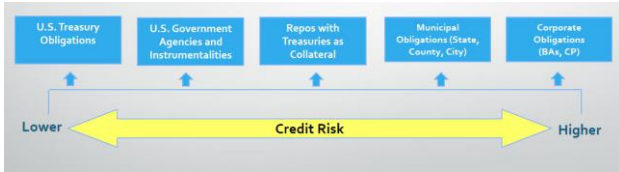
Municipal Securities Taxable Issue

Lake County Community College District, OH (Lakeland Community College) Facilities Construction & Improvement Bonds, series 2016B 2.00% 12/1/17
Priced 1/27/16 to yield 1.30%

Rate Comparison



Credit Risk



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Certificates of Deposit

135.144 Investment of interim moneys in federally insured certificates of deposit.

(A) In addition to the authority provided in section 135.141 or 135.143 of the Revised Code, the treasurer of state or the treasurer or governing board of a political subdivision may invest interim moneys in certificates of deposit in accordance with all of the following:

(1) The interim moneys initially are deposited with an eligible public depository described in section 135.03 of the Revised Code and selected, pursuant to section 135.12 of the Revised Code, by the treasurer of state or the treasurer or governing board of a political subdivision, for interim moneys of the state or of the political subdivision.

(2) For the treasurer of state or the treasurer or governing board of the political subdivision depositing the interim moneys pursuant to division (A)(1) of this section, the eligible public depository selected pursuant to that division invests the interim moneys in certificates of deposit of one or more federally insured banks, savings banks, or savings and loan associations, wherever located. The full amount of principal and any accrued interest of each certificate of deposit invested in pursuant to division (A)(2) of this section shall be insured by federal deposit insurance.

(3) For the treasurer of state or the treasurer or governing board of the political subdivision depositing the interim moneys pursuant to division (A)(1) of this section, the eligible public depository selected pursuant to that division acts as custodian of the certificates of deposit described in division (A)(2) of this section.

(4) On the same date the public moneys are redeposited by the public depository, the public depository may, in its sole discretion, choose whether to receive deposits, in any amount, from other banks, savings banks, or savings and loan associations.

(5) The public depository provides to the treasurer of state or the treasurer or governing board of a political subdivision a monthly account statement that includes the amount of its funds deposited and held at each bank, savings bank, or savings and loan association for which the public depository acts as a custodian pursuant to this section.

(B) Interim moneys deposited or invested in accordance with division (A) of this section are not subject to any pledging requirements described in section 135.18 or 135.151 of the Revised Code.

Amended by 129th General Assembly File No.67, HB 209, §1, eff. 3/22/2012.

Effective Date: 07-04-2006

Certificates of Deposit

Reviewed by National Financial Services LLC on 06/01/2016

DESCRIPTION	AMOUNT	INTEREST RATE	ESTIMATED MONTHLY INTEREST	ESTIMATED ANNUAL INTEREST	RATE	UNITED STATES FEDERAL RESERVE
CDs bought at \$250,000	\$250,000	0.00%	\$0.00	\$0.00	0.00%	
Account carried with National Financial Services LLC, Member NYSE, SIPC						

Certificates of Deposit

> Ohio Compliance Supplement

2014 Ohio Compliance Supplement

Indirect Laws & Statutorily Mandated Tests

- Any CD's purchased by a broker must be held in the name of the government. Also, the broker cannot be in possession of cash at any time. If we believe a broker has held cash for any length of time, AOS auditors should refer the matter to the Center for Audit Excellence and AOS Legal division for further evaluation. A way to verify compliance is to request monthly statements provided by the public depository located in Ohio. Ohio Rev. Code §135.144(A)(5) requires the initial public depository to provide public offices with a monthly account statement that includes the amount of its funds deposited and held at each bank, savings bank, or savings and loan association for which **the public depository acts as a custodian pursuant to Ohio Rev. Code §135.144**. If a public office does not have these statements, it may indicate that the money is being held by a broker-dealer in violation of Ohio Rev. Code §135.144.



Example

Straight Callable:

- FHLMC cusip #3134G8G45
- Issued 12/30/15
- Matures 12/30/20
- \$1,000,000 purchased at par
- Callable 3 months from issue
- 2.10% Interest Rate

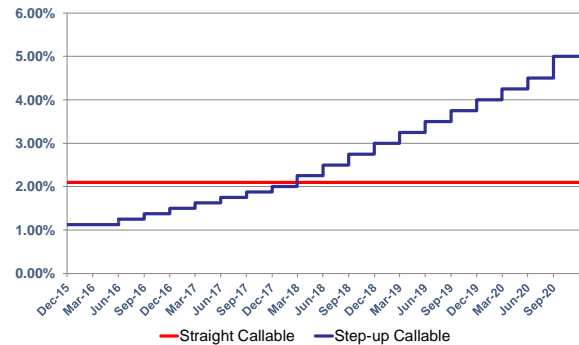
Yield to Maturity = 2.10%

Step-up Callable:

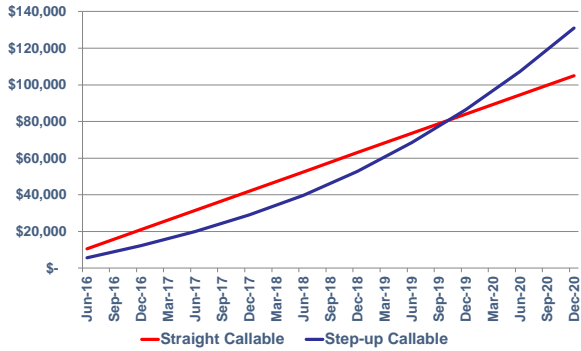
- FHLMC cusip #3134G8FY0
- Issued 12/30/15
- Matures 12/30/20
- \$1,000,000 purchased at par
- Callable 3 months from issue
- Rate rises from 1.125% to 5% per schedule

Yield to Maturity = 2.62%

Straight Callable vs. Step-up (Interest Rates)



Straight Callable vs. Step-up (Cumulative Interest)



Cumulative Interest

	Straight Callable	Step-up Callable	Difference
3 Months	\$5,250	\$2,812	\$2,438
6 Months	\$10,500	\$5,625	\$4,875
1 Year	\$21,000	\$12,188	\$8,812
2 Years	\$42,000	\$29,063	\$12,937
3 Years	\$63,000	\$52,813	\$10,187
4 Years	\$84,000	\$86,563	\$(2,563)
5 Years	\$105,000	\$130,938	\$(25,938)

Thank You

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Disclosure

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Any rates and yields shown are for illustrative purposes only. Any securities shown are for illustrative purposes only and should not be assumed to be eligible investments for your entity. You should review any investment's eligibility based on Ohio Revised Code and your entity's investment policy.

Past performance does not guarantee future results. Opinions and forecasts are all subject to change at any time, based on market and other conditions, and should not be construed as a recommendation of any specific security. Investing in securities involves inherent risks, including the risk that you can lose the value of your investment. There is no assurance that the investment process will consistently lead to successful results. The investment return and principal value of an investment will fluctuate so an investor's shares or units, when redeemed, may be worth more or less than their original cost.