What You Need (and should want) to Know About Investing Public Funds

Biographies

Jason Click, CFP
President, Public Funds

- Certified Financial Planner™
- The Ohio State University, BS Business/Finance, Summa Cum Laude
- Member of the Meeder’s Executive Committee
- Instructor for CPIM, State Auditor training, and regular presenter at various industry seminars
- Over 16 years of investment experience

Jason Headings, CMT
Vice President, Portfolio Manager

- Chartered Market Technician
- Miami University, BS Finance, BS Marketing
- Received the “Top Manager Award” from iMoneyNet, 2011, 2014
- Received the “Money Fund Intelligence Award”, 2011, 2012, 2013
- Instructor for CPIM and various industry seminars
- Over 10 years of fixed income experience
Economic Update

What Can We Do?
Market Environment

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

- Federal Policy
- Europe
- Oil
The Currency Wars

Source: Bloomberg as of 03/31/2015

Labor Market

Source: Bloomberg as of 03/31/2015
Unemployment

US Unemployment Rate fell to 5.4% as of 4/30/15

Source: Bloomberg

Ohio Unemployment by County

Ohio Unemployment Rates
March 2015
(Not Seasonally Adjusted)

Source: Ohio Department of Job and Family Services
For the QOQ measure, GDP for Q1 2015 was 0.2% versus 2.2% for Q4 2014.

Source: Bloomberg

GDP for the 1st Quarter was 3.0% YOY.

Source: Bloomberg as of 03/31/2015
U.S. Treasury Yield Curve

Source: Bloomberg

Principles of Investing
Investment Objectives & Goals

Legal
- Remember: Legal may not be suitable

Safety
- Preservation of principal

Liquidity
- What are your liquidity needs?

Yield
- Does the investment have a competitive yield?

Making Informed Investment Decisions
Cash vs. Core

• Cash Management – “Cash” Portfolio
  • Regular operating needs
  • Funds with uncertain time horizon

• Investment Management – “Core” Portfolio
  • Cash balance with time horizon typically greater than 6-12 months
  • Apply investment strategy to maximize earnings
Eligible Investments

- Bank Deposits
- STAR Ohio and STAR Plus
- US Treasury Bonds
- US Government Agency Bonds
- FDIC-insured Negotiable CDs
- Corporate Bonds
- Money Market Funds
- Banker’s Acceptances
- Municipal Bonds
- Commercial Paper

* Recent changes
Senate Bill 287

- Sections 135.14, 135.142, 135.143 and 135.35.
- Introduced in Senate on 2/25/2014 by primary sponsor Senator Jim Hughes
- Unanimously passed by Senate on 5/14/2014
- Unanimously passed by House of Representatives on 5/28/2014
- Signed by the Governor on 6/5/2014
- **Effective on 9/3/2014**

Public Subdivisions

- **Changes to 135.14**
- **Municipal Obligations**
  - Permits moneys to be invested in the bonds and other obligations of political subdivisions of Ohio.
  - Must be payable from general revenues of the political subdivision and backed by the full faith and credit of the political subdivision
  - Rated in the three highest classifications and purchased through a registered broker or dealer
  - Maximum of 20% of the portfolio
  - Public subdivision can not be not the sole purchaser of the bonds or other obligations at original issuance
  - Training requirement
- **Commercial Paper**
  - Increases the maximum allocations of CP from 25% to 40% of funds available for investment
  - Increases the term from 180 to **270 days**
  - Limits the investments of a single issuer to 5% of funds available for investment
  - Training by the Treasurer of State rather than the Auditor of State
Common Questions

“Can I invest in negotiable/brokered certificates of deposit?”
Certificates of Deposit

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

(A) In addition to the authority provided in section 135.14 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 135.181 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

[Image and data table]

[Footer information]
Certificates of Deposit

Account carried with National Financial Services LLC, Member NYSE, SIPC

CDs bought at $250,000

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.
“With rates so low, is it even worth my time to invest?”

Two Examples

1) Invest funds overnight at 0.20%

2) Build a laddered portfolio
### Overnight at 0.20%

- **Portfolio Size:** $10,000,000
- **Weighted Average Yield:** 0.20%
- **Annualized Interest Income:** $20,000

### Ladder Portfolio

<table>
<thead>
<tr>
<th>Ladder</th>
<th>Invested Dollars</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overnight</td>
<td>$1,666,667</td>
<td>0.20%</td>
</tr>
<tr>
<td>1 Year</td>
<td>$1,666,667</td>
<td>0.45%</td>
</tr>
<tr>
<td>2 Year</td>
<td>$1,666,667</td>
<td>0.80%</td>
</tr>
<tr>
<td>3 Year</td>
<td>$1,666,667</td>
<td>1.25%</td>
</tr>
<tr>
<td>4 Year</td>
<td>$1,666,667</td>
<td>1.60%</td>
</tr>
<tr>
<td>5 Year</td>
<td>$1,666,667</td>
<td>2.00%</td>
</tr>
</tbody>
</table>

**TOTAL** | **$10,000,000** |
Ladderred Portfolio

- **Portfolio Size:** $10,000,000
- **Weighted Average Yield:** 1.05%
- **Annualized Interest Income:** $105,000

What does this mean for you?

<table>
<thead>
<tr>
<th></th>
<th>Overnight Portfolio</th>
<th>Ladderred Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Size</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Weighted Average Yield</td>
<td>0.20%</td>
<td>1.05%</td>
</tr>
<tr>
<td>Annualized Interest Income</td>
<td>$20,000</td>
<td>$105,000</td>
</tr>
</tbody>
</table>

An increase of over **$85,000** of annual interest income
“If interest rates are going to rise, why would I want to invest in long maturities now?”
Two Examples

1) Purchase $1,000,000 of a 5 year Treasury today and hold it to maturity

2) Purchase $1,000,000 of a 2.5 year Treasury today and reinvest it in another 2.5 year Treasury at maturity

5 Year Treasury Purchased Today

**Rate: 1.60%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Interest Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$16,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>$16,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>$16,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>$16,000</td>
</tr>
<tr>
<td>Year 5</td>
<td>$16,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$80,000</strong></td>
</tr>
</tbody>
</table>
Where would 2.5 year Treasury rates have to be 2.5 years from now in order to earn the same amount of interest as buying a 5 year Treasury today?
Answer: 2.60%

<table>
<thead>
<tr>
<th>Year</th>
<th>Bond 1 (0.60%) Interest Earned</th>
<th>Bond 2 (2.60%) Interest Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>$3,000</td>
<td>$13,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>$3,000</td>
<td>$26,000</td>
</tr>
<tr>
<td>Year 5</td>
<td>$3,000</td>
<td>$26,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$15,000</td>
<td>$65,000</td>
</tr>
</tbody>
</table>

What are your rate expectations?

- 0.00%
- 0.50%
- 1.00%
- 1.50%
- 2.00%
- 2.50%
- 3.00%
- 3.50%
- 4.00%
- 4.50%

FED FUNDS RATE

- Slow Rise
- Rapid Rise

Map showing FED FUNDS RATE from May-14 to May-19 with two paths: Slow Rise and Rapid Rise.
“Are steps a good investment?”

Example

**Straight Callable:**
- $1,000,000 purchased at par
- Callable 6 months from issue
- 2.00% Interest Rate

Yield to Maturity = 2.00%

**Step:**
- $1,000,000 purchased at par
- Callable 6 months from issue
- Rate rises from 1% to 5% per schedule

Yield to Maturity = 2.23%
Cumulative Interest

<table>
<thead>
<tr>
<th></th>
<th>Straight Callable</th>
<th>Step</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Months</td>
<td>$5,000</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>6 Months</td>
<td>$10,000</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>1 Year</td>
<td>$20,000</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>2 Years</td>
<td>$40,000</td>
<td>$22,708</td>
<td>$17,291</td>
</tr>
<tr>
<td>3 Years</td>
<td>$60,000</td>
<td>$41,145</td>
<td>$18,854</td>
</tr>
<tr>
<td>4 Years</td>
<td>$80,000</td>
<td>$69,062</td>
<td>$10,938</td>
</tr>
<tr>
<td>5 Years</td>
<td>$100,000</td>
<td>$110,104</td>
<td>$(10,104)</td>
</tr>
</tbody>
</table>

“If I want to handle the investments myself, why should I work with more than one broker?”
Execution

Agency purchased at a price of $99.75

Security matures in 3 years, 2 months and is callable at anytime
### Summary

#### Purchased Security

<table>
<thead>
<tr>
<th></th>
<th>Maturity</th>
<th>PAR</th>
<th>Price</th>
<th>Cost</th>
<th>Yield to Maturity</th>
<th>Annual Interest Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broker Purchase</td>
<td>1/2/18</td>
<td>1,000,000</td>
<td>99.75</td>
<td>$997,500</td>
<td>1.10%</td>
<td>$10,200</td>
</tr>
<tr>
<td>Market</td>
<td>1/2/18</td>
<td>1,000,000</td>
<td>99.46</td>
<td>$994,600</td>
<td>1.19%</td>
<td>$10,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,900</strong></td>
</tr>
</tbody>
</table>

#### Meeder Recommendation

<table>
<thead>
<tr>
<th></th>
<th>Maturity</th>
<th>PAR</th>
<th>Price</th>
<th>Cost</th>
<th>Yield to Maturity</th>
<th>Annual Interest Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 year, 6 month call protection</td>
<td>11/28/17</td>
<td>1,000,000</td>
<td>100.00</td>
<td>100,000</td>
<td>1.20%</td>
<td>$12,000</td>
</tr>
</tbody>
</table>

“How do I know what I type of security I should be buying?”
Yield Curves by Security Type

*Assumes $1 million investment on 5/29/15

Thank You

Questions?
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