

CPIM

CENTER FOR PUBLIC INVESTMENT MANAGEMENT



A PROGRAM BROUGHT TO YOU BY:

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INVESTMENTS 404 AND 405: MUNICIPAL SECURITIES

2015 CPIM Academy

Agenda for Today

- Discuss investment parameters
- Understanding municipal securities
- Market for municipals
- Where to find information
- Credit ratings
- Buying municipals
- Risk/reward benefits
- Real life examples

Investment Parameters

- Chapter 135.14
 - Bonds and other obligations of this state, or the political subdivisions of this state
 - The bonds are payable from the general revenues of the political subdivision and backed by the full faith and credit of the political subdivision
 - Bonds are rated at the time of purchase in the three highest classifications by at least **one** nationally recognized rating service **and** purchased through a registered broker dealer
 - The aggregate value of the bonds does not exceed 20% of interims moneys available at time of purchase
 - Not the sole purchaser of the bonds
 - Additional training required

Investment Parameters

- Chapter 135.35
 - Bonds and other obligations of this state, or the political subdivisions of this state
 - No specific ratings requirements
 - No set limitation allowable percentage of total investments
 - No specific additional training required
 - No recent changes in investment language
- Charter City
 - Follow investment policy statement

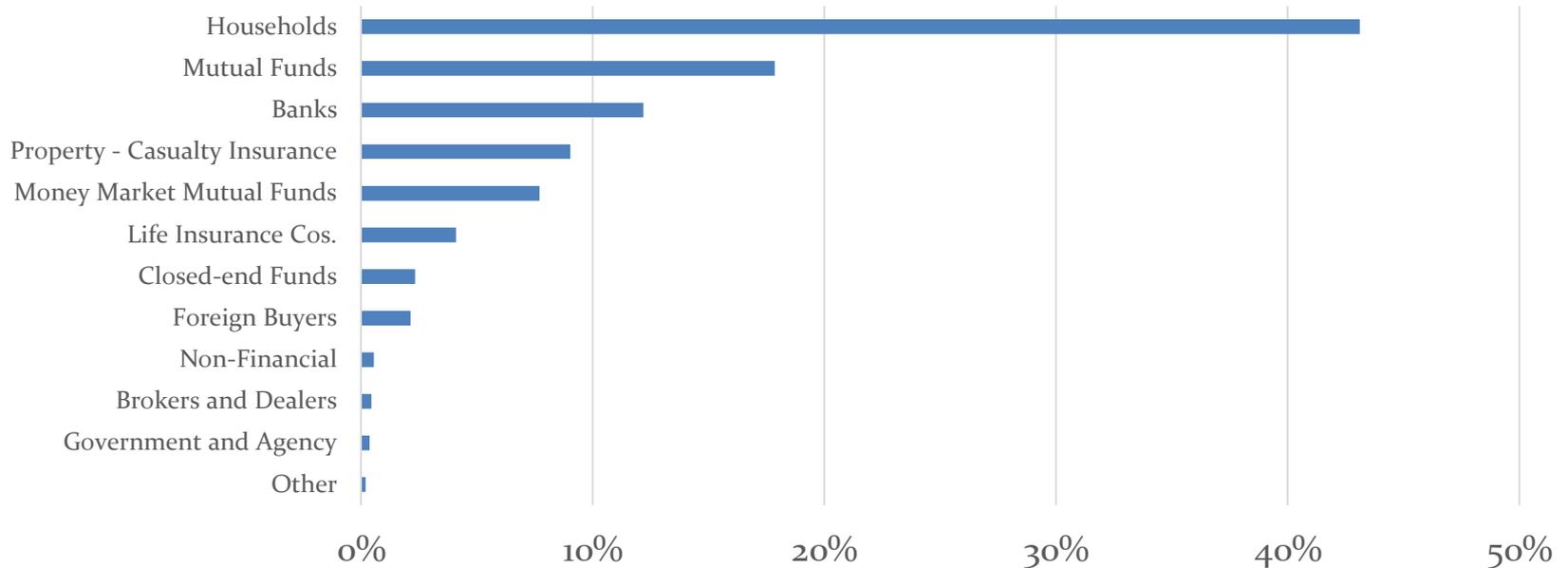
Municipal Bond Market

- Municipal obligations are generally issued as tax exempt securities
- Over \$3.7 trillion in total muni debt
- In 2014, total municipal issuance was \$314.9 billion*
- Scope of municipal market is large
 - Over 80,000 potential issuers and more than a million different securities
- By contrast:
 - Corporate equities have about 5,700 public companies with about 22,000 different securities

*Source: Thomson Reuters

Who Owns Municipals

Percent of Total Outstanding



Source: Federal Reserve Board, Flow of Funds Accounts. Data as of 3Q 2014, %'s based on total ownership of \$3,631.1(Billions)

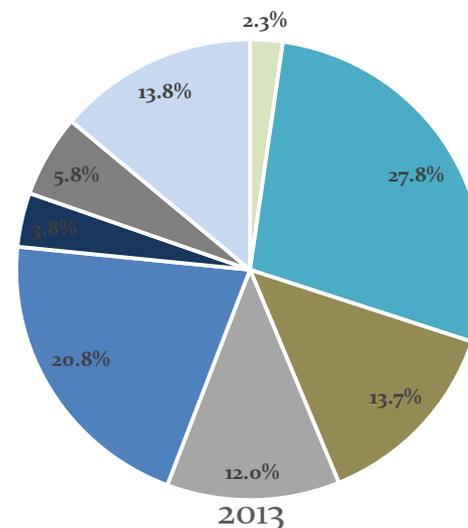
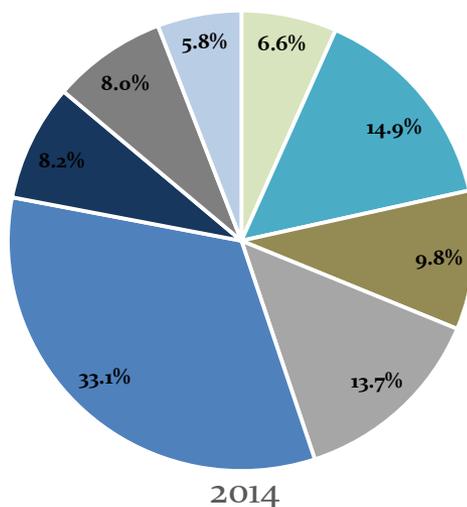
Municipal Bonds

- Types of government units that issue bonds
 - State
 - Counties
 - Cities
 - School Districts
 - Townships
 - Special Districts
 - Water and Sewer
 - Housing Authority
 - Port Authority

Ohio Municipal Bond Market

- In 2014, there was \$11.1 billion of new debt issued from 395 separate issuers

- State Governments
- State Agencies
- Counties & Parishes
- Cities & Towns
- School District
- Local Authorities
- Colleges & Universities
- Direct Issuer



*Total Issuance: 2013: \$11,449(millions) 2014: \$11,058(millions)

*Source: Bond Buyer (February 2015), Thomson Reuters

Rule Makers

- MSRB- Municipal Securities Rulemaking Board
 - Establishes rules for the municipal market
- EMMA – MSRB’s Electronic Municipal Market Access
 - Reports on municipal bond trades
- FINRA – Financial Industry Regulatory Authority
 - Regulates brokerage Firms
- SEC- Securities and Exchange Commission
 - Regulates securities and markets

Types of Muni's

- General Obligation Bonds (GO's)
 - Secured by the issuer
 - Full faith and credit
 - Unlimited Tax GO (UTGO)
 - Limited Tax GO (LTGO)
- Revenue bonds
 - Secured by a revenue stream of issuer
 - Not currently permissible under ORC
- Refunding bonds
 - Refinancing of prior debt issue
- Notes
 - Short-term notes (BANS, TANS)

Taxable Municipal Bonds

- Interest rates on tax-exempt bonds has historically been in the 80-90% of Treasury Yields
- Thus most issuers look to issue tax-exempt bonds
- If strict IRS restrictions are not met, then bonds can be issued as taxable municipal bonds
- Recent examples include the Build America Bonds (BABs)
- Yields tend to be higher, need to compare to equivalent US Government Agency/Treasury

Callable Bonds

- An optional call provision gives the issuer the choices to call the bonds
- Could have a call premium
- Understand the terms in which bonds can be called
- If called, probably means interest rates have fallen
- Bond price could be more sensitive to interest rates changes

Investment Risk

Market risk

- Bond's market price will rise as interest falls, and will decline as interest rates rise

Liquidity risk

- May not be an active markets for particular bond

Credit/default risk

- Risk the issuer may not make principal and interest payments

Call risk

- Bond is called before stated maturity

Political/Event risk

- Unforeseen risk

Municipal Default- Since 1970

Purpose	Number of Defaults	% of Defaults
Housing	29	36%
Hospitals & Health Service Providers	23	29%
Infrastructure	9	11%
Education	4	5%
Cities	4	5%
Counties	3	4%
Special Districts	0	0%
State Governments	0	0%
Pool Financings	0	0%
Other	0	0%
General Obligation	8	10%
Total	80	100%

¹Source: Moody's U.S. Municipal Bond Defaults and Recoveries, 1970-2013, May 7, 2014

Investments 404 and 405 – Municipal Securities

Credit Quality

- Bond credit rating indicates risk of default
 - The higher the rating the less perceived risk
 - The lower the rating the potential for higher yields
- Credit enhancements
- Bond insurance
 - Not used often in today's markets
- Covenants and other legal protection

Rating Agencies

- Three rating agencies
 - Moody's
 - S&P
 - Fitch
- No one agency better than others
- Municipal ratings at new issue
 - Can change over life of issue
 - Changing economic or financial situations
 - Need to monitor

Moody's

- Long-term rating scale
 - Aaa- Obligations are judged to be of the highest quality, subject to the lowest level of credit risk
 - Aa – Obligations are judged to be of a high quality and are subject to very low credit risk
 - A - Obligations rated A are judged to be upper-medium grade and are subject to low credit risk
- Short-term rating scale
 - MIG₁ – Denotes superior credit quality. Rating can be used on notes up to three years in maturity

Moody's

Long-term versus Short-term ratings

Long-Term Rating

Short-Term Rating

Aaa

Aa1

Aa2

Aa3

A1

A2

A3

MIG₁

MIG₂

Source: Moody's

S&P

- Long-term rating scale
 - AAA- Issuer's capacity to meet its financial commitment is extremely strong
 - AA-Issuer's capacity to meet its financial commitment is extremely strong
 - A - Obligations is somewhat more susceptible to the adverse effects of changes in the circumstances and economic conditions. Financial commitment on the obligation is still strong
- Short-term rating scale
 - SP-1 – Strong capacity to pay principal and interest. Issuer with very strong capacity is given a plus (+) designation. Rating can be used on notes up to three years in maturity

Long term versus Short term ratings

Long-Term Rating

Short-Term Rating

AAA

AA+

AA

AA-

A+

A

A-1+/Sp-1

Sp-1

Source: S&P

Fitch

- Long-term rating scale
 - AAA- Denotes the lowest expectation of default risk
 - AA–Denotes expectations of very low default risk
 - A - Denotes expectations of low default risk. Maybe more vulnerable
- Short-term rating scale
 - F1– Strong capacity for timely payment of financial commitments. Issuer with very strong capacity is given a plus (+) designation. Rating can be used on notes up to three years in maturity

Long term versus Short term ratings

Long-Term Rating	Short-Term Rating
AAA	
AA+	
AA	F1+
AA-	
A+	
A	F1
A-	

Source: Fitch

Rating Comparison

Long-Term Ratings

Moody's	S&P	Fitch
Aaa	AAA	AAA
Aa1	AA+	AA+
Aa2	AA	AA
Aa3	AA-	AA-
A1	A+	A+
A2	A	A
A3	A-	A-

Short-Term Ratings

Moody's	S&P	Fitch
MIG1	A-1+/SP-1+/SP-1	F1+/F1

Where to Buy Municipals

- Secondary Market
- New Issue Market
- Purchased through registered broker/dealer
- Work through investment advisor

Secondary Market for Municipals

- Purchased in the open market after initial issuance
- Trade executed with broker dealers
- Need to gather information on issuer and deal
- Typically will have accrued interest
- Ratings may have changed since original issuance
- CUSIP available
- Recent MSRB trade information

New Issue Market for Municipals

- New issue market
 - Brand new issue
 - Typically bought directly from firm underwriting deal
 - Settlements dates could be longer
 - Typically no accrued interest
- Preliminary official statement available
- CUSIPs not available
- No recent MSRB trade information
- Understand the professionals involved:
 - Underwriter
 - Financial Advisor
 - Trustee

Where to Find Information

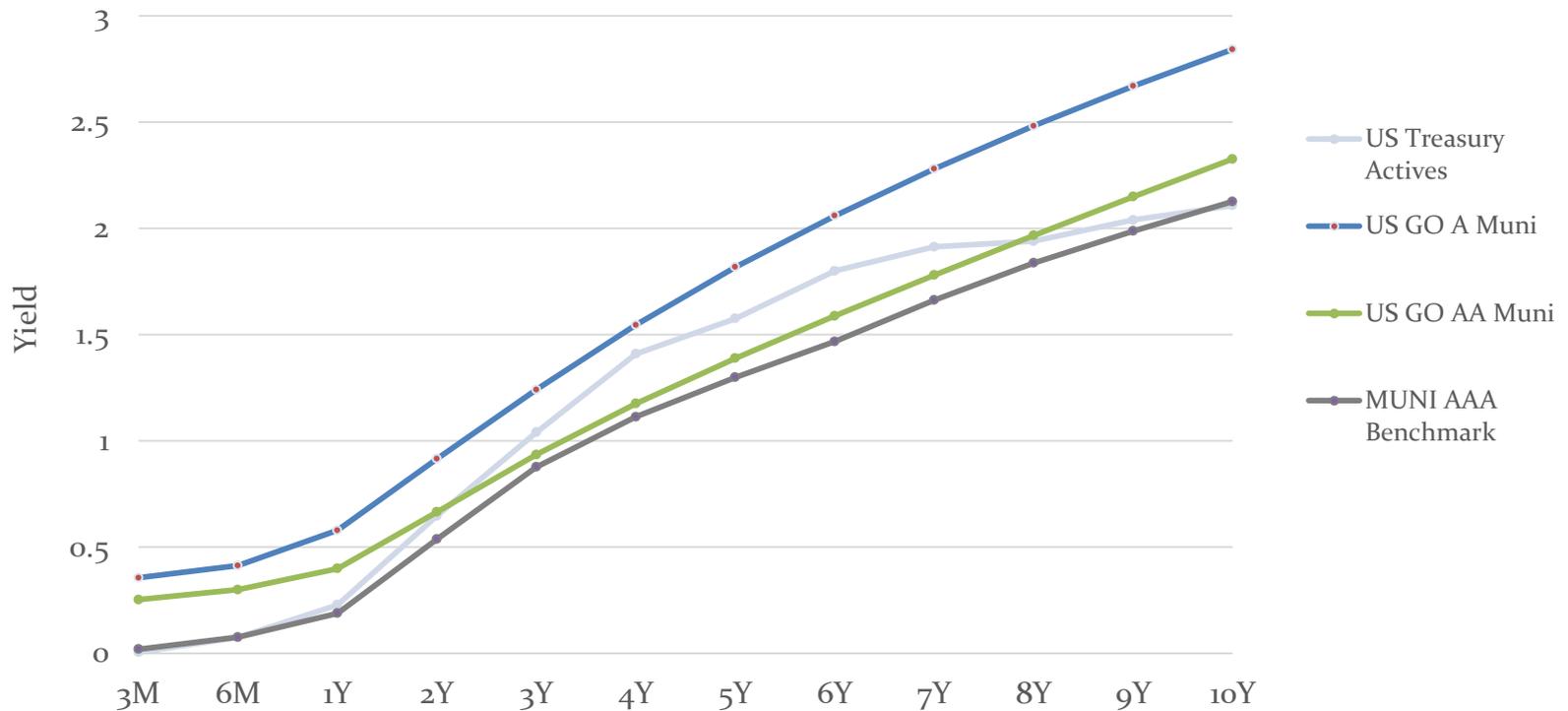
- EMMA - www.emma.msrb.org
 - Official statements
 - Continuing disclosures
- OMAC – www.ohiomac.com
- Auditor of State website – www.ohioauditor.gov
- The Bond Buyer – www.bondbuyer.com
- Bloomberg
- MMD- Municipal Market Data
- Issuer

Questions to Consider

- Financial health of issuer
- Recent trade information
- Ratings changes
- Is this a GO issue and what type?
- What is the purpose of the issue?
- Size of issuer/deal
- Value over comparable security
- CUSIP number

Relative Value Slide

Price example



¹Source: Bloomberg, March 5, 2015

²US GO Municipal curves represent Bloomberg Fair Value for General Obligation issues.

Understand Dealer Talk

- Bid/ask spread – the difference between the price paid for the bond and the sales price
 - Dealer pays bid price- sells at ask
 - Spread can be different based on maturity, size of trade, complexity of deal
- Municipal trades generally settle three days after trade date – T+3
- Dealer is required to disclose to customers all material information known about the bonds

Price Evaluation

- Example: \$500,000 offering of State of Ohio General Obligation municipal bond 5% coupon, 5 year maturity

	Broker A	Broker B
Ask/Offer Price	\$119.746	\$119.503
Yield	1.40%	1.44%
Total Cost	\$598,730	\$597,515

The \$1,215 difference equates to 25 basis points on \$500,000 purchase.

Source: Bloomberg, March 5, 2015

Note: The total cost does not include accrued interest.

Understanding Accrued Interest

- Most municipal bonds accrue interest on a 30/360 day basis
 - Accrued Interest =
Interest rate x Par Value x (# of days/360)
 - Interest rate is the coupon rate on the bond
 - # of days is counted from last coupon payment date up to *but not* including the settlement date
 - Settlement date is when bonds are delivered (typically different from trade date)

Calculating Accrued Interest

- Example: \$500,000 State of Ohio GO
 - 5% coupon rate, semi-annual each Dec & June 1st
 - Settlement date: March 6th
 - Previous coupon payment was Dec 1st
 - December, January & February at 30 days each = 90 days
 - March at 5 days (up to, *but not* including, settlement date of March 6th)
 - Total days of accrued = $30+30+30+5 = 95$ days
 - Interest (aka coupon) x Par x days/360
 - $0.05 \times \$500,000 \times (95/360) = \$6,597.22$ paid by buyer to seller at settlement on March 6th
 - On June 1st, buyer receives full semi-annual coupon payment of \$12,500

Accounting for Accrued Interest

- Decision on how to post accrued interest
 - Purchase date:
 - Post negative interest transaction
 - On March 6th, post negative interest of **\$6,597.22**
 - Receipt in at next scheduled coupon payment date
 - On June 1st, post semi-annual interest of \$12,500 (which includes the accrued interest paid out on 3/6 of \$6,597.22)
 - Maturity date:
 - Mark up total cost of security by accrued
 - Cost of \$597,515 + accrued of \$6,597.22 = \$604,112.22
 - Mark down final coupon payment at maturity date
 - Final coupon of \$12,500 less accrued of \$6,597.22 = \$5,902.78
- Be consistent
- No right or wrong answer

Interest Rate Versus Yield

- **Interest Rate:** actual coupon rate and amount of interest paid on the security (5% in previous example)
- **Yield:** actual return on the investment (1.44% in previous example)
- **Premium vs Discount Price:** When bond is purchased above or below par (par is \$100)
 - Premium: Purchase \$500,000 at \$119.503.
 - Total purchase price is \$597,515 or $\$500,000 \times 1.19503$
 - Discount: Purchase \$500,000 at \$99.
 - Total purchase price is \$495,000 or $\$500,000 \times 0.99$
 - At maturity, *regardless of purchase price*, will be paid at \$100
 - Total maturity is $\$500,000 \times 1.00 = \$500,000$

Accounting for Premium/Discount

- Decision on accounting for premium or discount
 - Total cost of security includes premium or discount
 - Becomes the cost basis of the security
 - Write up/down at maturity:
 - Entire premium or discount is considered at final maturity
 - Post against interest earnings
 - Can appear to be a large loss or gain at final maturity
 - Amortization/Accretion:
 - Amortize for premiums or accrete for discounts over the life of the holding.
 - Post against interest earnings
 - Could be hard to track

Municipal Securities: Pros & Cons

PROS

- Potential for higher yields
- Diversification
- Lock in fixed rates

CONS

- Due diligence needs to be preformed
- Potential for higher risk
- More difficult to administer

Investment Example

- ABC City has \$10 million in interim funds
- City would like to allocate 20% or \$2 million to municipal holdings
- Analyze three separate offerings:
 - Secondary Market
 - New Issue Market
 - Note Issue
- Follow ORC 135.14 guidelines

Remember Investment Checklist

- Get CUSIP number
- Check EMMA
- Receive Bloomberg printouts
- Verify ratings
 - Set time to re-verify, set alerts from EMMA
 - Semi-annually
- Confirm allocation was correct
- Post interest/premium/discount appropriately

MMD Scales

Municipal Yield Curves as of 03/03/2015 General Obligations

Year	Aaa	Aa	A
2016	0.14	0.15	0.27
2017	0.51	0.56	0.69
2018	0.88	0.97	1.11
2019	1.08	1.20	1.36
2020	1.28	1.42	1.62

Source: Municipal Market Data

Comparable Securities

Comparable Yields 03/03/2015

Year	US Treasury	Government Agency Non-Callable	Government Agency Callable
2016	0.26	0.33	0.40
2017	0.68	0.75	0.95
2018	1.09	1.11	1.45
2019	1.36	1.48	1.75
2020	1.61	1.76	2.10

Source: Bloomberg

Investment Example

Secondary Market

Name	City of Akron
Type	General Obligation Bond
Par amount	\$500,000
Ask/Offer Price	\$103.353
Yield	.38%
Coupon	5.00%
Maturity date	12/1/2015
CUSIP	010033ZE1

Source: Bloomberg, March 5, 2015

Bloomberg – Description Page (DES)

010033ZE Muni 92) Report 93) Alert Page 1/11 Description: Municipal
 AKRON OH 94) Notes 97) Settings
 REF-VAR PURP-SER A CUSIP 010033ZE1

Ticker AKR Cpn 5.000 Maturity 12/01/2015 Dated 11/30/2010 State OH

21) Municipal Bond 22) Series 23) Issuer Description

Pages	Municipal Bond Information	Trading Information
1) Bond Info	Issue Type GENERAL OBLIGATION LTD	1st Settle Dt 11/30/2010
2) Addtl Info	Ult Borrower City of Akron OH	Next Settle Dt 03/09/2015
3) Involved Parties	Maturity Type NON-CALLABLE	Int Accrual Dt 11/30/2010
4) Adj Cpn Info	Ext Redemption NONE	1st Coupon Dt 06/01/2011
5) Credit Enhance	Coupon 5.000 FIXED	Week of Sale 11/22/2010
6) Credit Ratings	Prc/Yld @ Iss 113.043/2.230	Award 11/23/2010 13:07
7) Call Sched & ERP	Coupon Freq SEMI-ANNUAL	First Trade 11/23/2010 16:30
8) Put Schedule	Tax Provision FED & ST TAX-EXEMPT	
9) Sink & Est Sink	Credit Enhancement	
10) Refunding Info		
11) DES Notes		
	Bond Ratings	
	S&P'S AA- STA	
	FITCH AA- STA	

Quick Links

- 31) TDH MSRB Trade
- 32) CACS Material Evt
- 33) CF Filings
- 34) CN Sec News
- 35) HDS Holders
- 66) Send Bond

Bloomberg – Description Page (DES)

010033ZE Muni 92) Report 93) Alert Page 2/11 Description: Municipal
 AKRON OH 94) Notes 97) Settings
 REF-VAR PURP-SER A CUSIP 010033ZE1
 Ticker AKR Cpn 5.000 Maturity 12/01/2015 Dated 11/30/2010 State OH

21) Municipal Bond 22) Series 23) Issuer Description

Pages	Additional Security Information	Issuance Information
1) Bond Info	Purpose REFUNDING BONDS	Maturity Size 3,055,000.00 ←
2) Addtl Info	Source AD VALOREM PROPERTY TAX	Amount Out 3,055,000.00
3) Involved Parties	SPECIAL ASSESSMENT	Issue Size 24,045,000.00
4) Adj Cpn Info	Depository DTC	
5) Credit Enhance	Form BOOK-ENTRY	
6) Credit Ratings	Offering Type NEGOTIATED	
7) Call Sched & ERP	Ofc/Disclosure Y/Y	
8) Put Schedule	Calc Type (46) MUNICIPAL BONDS	
9) Sink & Est Sink	Day Count (29) US MUNI: 30/360 ←	
10) Refunding Info	Piece/Inc/Par 5,000/5,000/5,000	
11) DES Notes	Industry (G0) General Obligation	
Quick Links	BBGID BBG0019H8X45	
31) TDH MSRB Trade	ISIN US010033ZE13	
32) CACS Material Evt	SEDOL N.A.	
33) CF Filings		
34) CN Sec News		
35) HDS Holders		
66) Send Bond		

Bloomberg- Ratings Page

010033ZE Muni 92) Report 93) Alert Page 6/11 Description: Municipal
 AKRON OH 94) Notes 97) Settings
 REF-VAR PURP-SER A CUSIP 010033ZE1
 Ticker AKR Cpn 5.000 Maturity 12/01/2015 Dated 11/30/2010 State OH

21) Municipal Bond 22) Series 23) Issuer Description

Pages

- 1) Bond Info
- 2) Addtl Info
- 3) Involved Parties
- 4) Adj Cpn Info
- 5) Credit Enhance
- 6) Credit Ratings
- 7) Call Sched & ERP
- 8) Put Schedule
- 9) Sink & Est Sink
- 10) Refunding Info
- 11) DES Notes

Quick Links

- 31) TDH [MSRB Trade](#)
- 32) CACS [Material Evt](#)
- 33) CF [Filings](#)
- 34) CN [Sec News](#)
- 35) HDS [Holders](#)
- 66) [Send Bond](#)

Credit Ratings

Agency	Bond Rating	Watch	Outlook	Effective Date	Prev Rating
MOODY'S	No ratings				
STANDARD & POOR'S					
Bond Rating	AA-		STA	11/18/2010	←
FITCH					
Bond Rating	AA-		STA	11/16/2012	AA- ←
KBRA	No ratings				

Bloomberg – MSRB Trades

010033ZE Muni 94 Export Trade History: MSRB
 Issuer AKRON OH 97 Settings
 Series REF-VAR PURP-SER A CUSIP 010033ZE1
 Spread YTW YTM Coupon 5.000 Maturity 12/01/15 Issued 11/30/10 State OH
 View Price Range 09/15/14 - 03/04/15 Trade Size All Sizes

1) Bond 2) Series 3) Issuer

Trade Aggregate			Price			Dealer to Client Volume(M)			D→D
Days	Volume (M)*	Trds	High	Low	Avg	Dlr Buy	Dlr Sell	Net	Vol(M)
3	900	4	105.199	103.349	104.274	450	450	0	0

98) Charts

	Date	Vol(M)*	Trds	Price			Dealer to Client Volume(M)			D→D
				High	Low	Avg	Dlr Buy	Dlr Sell	Net	Vol(M)
101)	03/04/15	600	2	103.359	103.349	103.354	300	300	0	0
102)	10/15/14	150	1	105.199	105.199	105.199	0	150	-150	0
103)	10/09/14	150	1	105.188	105.188	105.188	150	0	150	0

Security offered at \$103.353

*Volumes of MM+ are considered 5MM until the actual volume is disclosed.

Bloomberg- Trade Settlement

010033ZE Muni		Yield and Spread Analysis			
		95 Buy	96 Sell	97 Settings	
1) Yield & Spread		2) Yields			
AKRON OH		CUSIP 010033ZE1			
Settle	03/09/15	Ticker	AKR	Cpn	5.000
		Maturity	12/01/2015	Dated	11/30/2010
		State	OH		
Price	103.353	To Maturity		To Worst	
Concession	0.000	12/01/2015		12/01/2015 @ 100.000	
Price less Concession	103.353	Yield	% Tsy	Yield	% Tsy
Yield (no Concession)		0.381	239.6	0.381	239.6
Yield with Concession		0.381	239.6	0.381	239.6
After Tax Yield (Inc 43.40 CG 23.80 OID 0.00)		0.381	239.6	0.381	239.6
Taxable Equivalent Yield @ 43.40		0.674	423.9	0.674	423.9
Current Yield	4.838				
PV	0.01	0.00748		0.00748	
Modified Duration		0.714		0.714	
Issue prc = 113.043(2.230). Bond purchased at a premium.					
Invoice		Income	To 12/01/2015	Description	
Face	500 M	Principal	500,000.00	Type	GENERAL OBLIG...
Principal	516,765.00	Cpn Payment	25,000.00	Prc/Yld @ Iss	113.043/2.230
Concession	0.00	Reinv @ 0.38 %	23.81	Lead	STIFEL NICOLAU...
Prin less Conc	516,765.00	Total Income	525,023.81	Issue Size	24MM
Accrued (98 Days)	6,805.56			Maturity Size	3.1MM
Total (USD)	523,570.56			Amt Out	3.1MM

EMMA Official Statement



Quick Search

Enter CUSIP or Name



Security Details

AKRON (CITY OF), OH SER 2010A, G.O. VARIOUS PURPOSE REFUNDING BONDS (OH)
AKRON OHIO REF-VAR PURP-SER A (OH)*
CUSIP: 010033ZE1*

Dated Date: 11/30/2010
Maturity Date: 12/01/2015
Interest Rate: 5 %
Principal Amount At Issuance: \$3,055,000
Initial Offering Price/Yield: 113.043

[Official Statement](#) [Continuing Disclosure](#) [Trade Activity](#) [Ratings](#)

View the official statement, which is the most complete source of information about the securities as of the time of initial issuance.

Official Statement

Be advised that these are large files that can take several minutes to download, depending on your connection speed and the level of traffic on EMMA. You should preview the cover, if available, before downloading to ensure that this is the correct document.

[Click to view; right click to save]

NOTE: Failure to review entire official statement together with all amendments may result in incomplete understanding of your security. Files can be viewed individually below but should not be read in isolation from one another.

Download Document

[Official Statement posted 11/29/2010 \(1.1 MB\)](#)

[View Document Archive](#)



Preview

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Why read the official statement?

The official statement describes the essential terms of the bonds, including call features, sources of repayment, issuer's covenants, and much more.

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EMMA RATINGS



Quick Search

Enter CUSIP or Name



Security Details

AKRON (CITY OF), OH SER 2010A, G.O. VARIOUS PURPOSE REFUNDING BONDS (OH)

AKRON OHIO REF-VAR PURP-SER A (OH)*

CUSIP: 010033ZE1*

S&P			
Long-Term Debt Rating	AA- (effective: 11/18/2010)	Outlook/Credit Watch	STABLE (effective: 11/18/2010)

Fitch			
Long-Term Issue Rating	AA- (effective 11/10/2014)	Long-Term Issue Rating Alert Code	RO:Sta (effective 11/10/2014)

EMMA Recent Price History

Security Details

AKRON (CITY OF), OH SER 2010A, G.O. VARIOUS PURPOSE REFUNDING BONDS (OH)
 AKRON OHIO REF-VAR PURP-SER A (OH)*
CUSIP: 010033ZE1*

Dated Date: 11/30/2010
Maturity Date: 12/01/2015
Interest Rate: 5.0 %
Principal Amount At Issuance: \$3,055,000
Initial Offering Price/Yield: 113.043

Same
 information from
 Bloomberg

Trade Summary

View daily summary of trade price and yield information for this security.



Trade Details

View historical trade price and yield information for this security.

Trade Price and Yield

View daily summary of price and yield information for trades in this security, including a graph of trade prices over time. [Learn more about trade prices.](#)

Display results | Find in results:

	Trade Date	HighLowPrice (%)	HighLowYield (%)	Trade Count	Total Trade Amount (\$)
	03/04/2015	103.359 / 103.349	0.47 / 0.441	2	600,000
	10/15/2014	105.199 / 105.199	0.32 / 0.32	1	150,000
	10/09/2014	105.188 / 105.188	0.396 / 0.396	1	150,000

Checklist for Secondary Market

- CUSIP
- Verify GO
- Confirm Ratings
- Callable/Non-callable
- Coupon Rate
- Yield
- Recent Trade Prices
- Account for Trade

Investment Example

New Issue Market – Bond Issue

Name	ABC School District
Type	General Obligation Bond- unlimited tax
Total issue size	\$38,900,000
Serial Par amount	\$535,000
Ask/Offer Price	\$105.685
Ratings	Aa3 – Moody's
Yield	.60%
Coupon	4.00%
Maturity date	12/1/2016
CUSIP	Not available

Source: Bloomberg, March 5, 2015

Official Statement

NEW ISSUE BOOK-ENTRY FORM ONLY

**Ratings: Moody's: Aa3
See "RATING" herein.**

OFFICIAL STATEMENT

\$38,900,000

ABC SCHOOL DISTRICT

**School Facilities Construction and Improvement Bonds, Series
2015 (General Obligation - Unlimited Tax)**

Voted November 4, 2014

Dated: Date of Delivery

Due: December 1, as shown on the inside cover

The School Facilities Construction and Improvement Bonds Series 2015 (the "Bonds") are **voted general obligation debt of the ABC School District, Ohio** (the "School District"), and the full faith, credit and revenue of the School District are irrevocably pledged for the prompt payment of the principal of and interest on the Bonds. (See "SECURITY AND SOURCE OF PAYMENT FOR THE SCHOOL DISTRICT'S GENERAL OBLIGATION DEBT" herein.) Terms used herein with initial capitalization where the rules of grammar would not otherwise so require and not defined have the meanings given to them under "DEFINITIONS" herein.

Interest on the Bonds will be payable at the respective rates shown on the inside cover herein on June 1 and December 1 of each year, beginning December 1, 2015, to the Bondholders of record as of the record dates described in the Bond Resolution (as defined herein).

Principal of the Bonds will be payable at the designated corporate trust office of The Huntington National Bank, Columbus, Ohio, as registrar, paying agent and transfer agent for the Bonds.

The Bonds will be issuable as fully registered bonds without coupons in the denominations set forth herein. The Bonds will be issuable under a book-entry only method and registered in the name of The Depository Trust Company ("DTC") or its nominee. There will be no physical delivery of the Bonds to the ultimate purchasers. The Fifth Third Securities, Inc. (the "Underwriter") has satisfied the requirements of DTC for the Bonds to be eligible for its book-entry services. (See "BOOK-ENTRY ONLY SYSTEM" herein.)

The Bonds maturing on and after December 1, 2025 will be subject to optional redemption prior to stated maturity, as set forth herein. The Term Bonds maturing December 1, 2038 and December 1, 2043 will be subject to mandatory sinking fund redemption prior to stated maturity as set forth herein. (See "THE BONDS - Redemption Provisions" herein.)

The Bonds are offered when, as and if issued and received by the "Underwriter", subject to prior sale and to withdrawal or modification of the offer without notice.

Certain legal matters relating to the issuance of the Bonds are subject to the approving opinion of Bricker & Eckler LLP, Bond Counsel, Columbus, Ohio. (See "LEGAL MATTERS" and "TAX MATTERS" herein.)

This cover page contains certain information for general reference only. It is not a summary of the provisions of the Bonds. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

This Official Statement has been prepared by the School District in connection with the original offering for sale by it of the Bonds. It is expected that delivery of the Bonds in definitive form will be made through DTC on or about March 25, 2015. The date of this Official Statement is February 25, 2015, and the information herein speaks only as of that date.



Checklist for New Issue/Note Market

- Obtain POS/OMAC Report
- Get MMD Scale
- Verify GO
- Confirm Ratings
- Callable/Non-callable
- Coupon Rate
- Yield
- Ask for comparable recent issues
- Verify you are not the sole purchaser
- Accounting for Trade

Investment Example

New Issue Market – Note Issue

Name	Sample Ohio City
Type	General Obligation BANS- limited tax
Par amount	\$2,835,000
Ask/Offer Price	\$100.796
Ratings	MIG1 – Moody’s
Yield	.45%
Coupon	1.25%
Maturity date	03/18/2016
CUSIP	Not available

Source: OMAC

OMAC Report



Ohio Municipal Advisory Council

Not an agency of the State of Ohio
9321 Ravenna Road, Suite K, Twinsburg, Ohio 44087-2461
Telephone: (330) 963-7444 (800) 969-OMAC
Fax (330) 963-7553

SAMPLE CITY, OHIO

(XYZ County)

Federal Identification Number – 34-6400011

Revised Report No. N337-14

Date – March 5th, 2015

OMAC Fee

Rating: **Moody's MIG 1**

\$2,835,000 Street Improvement (general obligation limited tax)

Bond Anticipation Notes, Series 2015

Dated March 18, 2015

Due March 18, 2016

Coupon: 1.250%

Yield: 0.450%

Price: 100.796%

Fiscal Officer John Smith, Finance Director
1234 Main Street
Sample, Ohio 41111

Telephone No. 513-686-1234

Purchaser – KeyBanc Capital Markets, Inc.

Opinion – Squire Patton Boggs (US) LLP
Attorney – John Larson

Paying Agent – The Huntington National Bank

Denominations – \$100,000.

Book Entry – Yes.

Bank Qualified – No.

Security – Payable from general limited taxes and City Income taxes.

Key Notes for Buying Municipals

- Make informed decisions
- Does it fit overall investment profile
- Understand the issuer's credit
- Perform relative value comparisons
- Price evaluation scrutiny
- Demand transparent fees

Questions?

