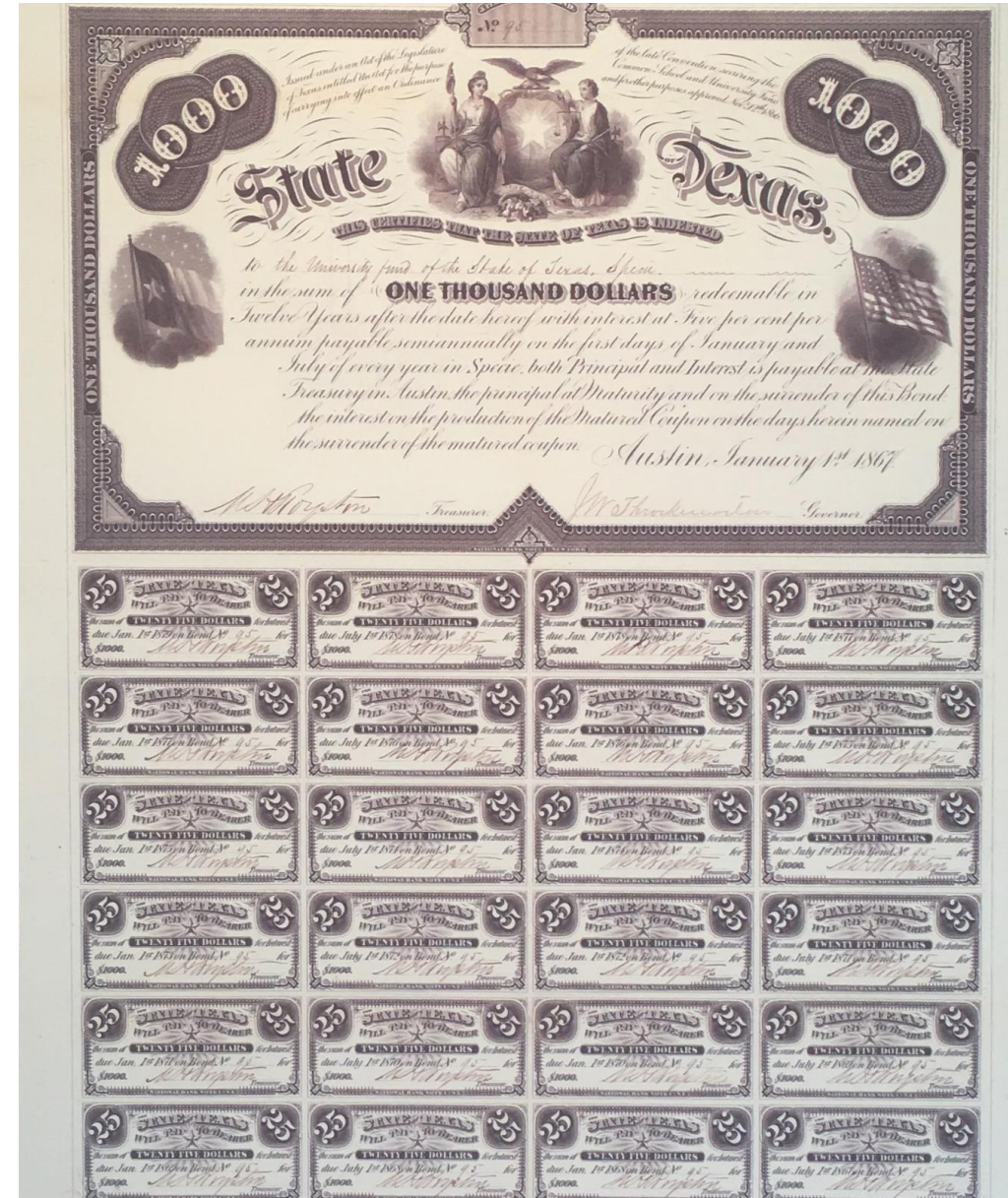
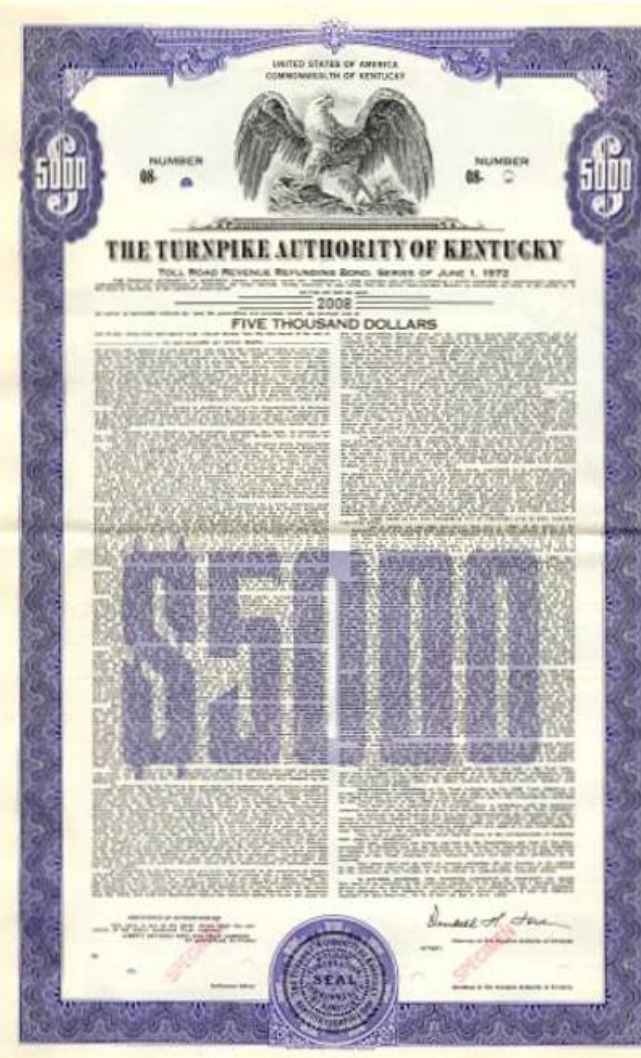


# Municipal Bonds: Refresher and Tax Considerations

Melissa Woodley, PhD, CFA  
Associate Professor of Finance

# Municipal Bonds



# Issuer Types

## **General Governments**

- State
- City
- County
- K-12 Public School District
- Special District

## **Municipal Utilities**

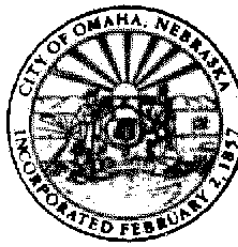
- Electric Utility
- Mass Transit
- Toll Facility
- Water/Sewer Utility

## **Competitive Enterprises**

- Charter School
- Higher Education
- Hospitals & Health Service Providers
- Hotel
- Housing
- Not-for-Profit
- Private K-12

# Repayment of Municipal Bonds

- General Obligation Bonds
  - Limited GO
  - Unlimited GO
- Revenue Bonds
  - Pledged revenues
  - Important to understand the project backing the bonds



\$94,500,000  
CITY OF OMAHA, NEBRASKA  
Various Purpose Bonds Series 2023

**Dated: Date of Delivery**

The above captioned bonds (the “Bonds”) are issuable in fully registered form in the denominations of \$5,000 and integral multiples thereof. Interest on the Bonds is payable semiannually on April 15 and October 15 of each year, commencing April 15, 2024, by wire transfer, check or draft mailed to the registered owner as of the applicable record date at the address shown on the books of registry maintained by BOKF, National Association, as Registrar. Principal of the Bonds is payable upon presentation and surrender of the Bonds at the principal corporate office of BOKF, National Association, as Paying Agent, in Omaha, Nebraska. The Bonds are subject to optional redemption prior to maturity at the principal amount thereof plus interest to the redemption date all as described in this Official Statement.

**Due: April 15, as shown on inside cover page**

The Bonds initially will be registered in the name of Cede & Co., as nominee for The Depository Trust Company, New York, New York (“DTC”), which will act as securities depository for the Bonds. Purchases of the Bonds may be made only in book-entry form in authorized denominations by credit to participating broker-dealers and other institutions on the books of DTC as described herein. Purchasers will not receive certificates evidencing the Bonds. Principal of and interest on the Bonds will be payable by the paying agent directly to DTC as the registered owner thereof. Disbursement of such payments to the DTC Participants is the responsibility of DTC, and disbursement of such payments to the beneficial owners is the responsibility of the DTC Participants and the Indirect Participants, as more fully described herein. Any purchaser of a beneficial interest in the Bonds must maintain an account with a broker or dealer who is, or acts through, a DTC Participant to receive payment of the principal of and interest on such Bonds. See “THE BONDS—Book-Entry Only System” herein.

The proceeds of the above-captioned bonds will be used to pay the costs of acquiring equipment and constructing improvements relating to (i) streets and highways, (ii) public safety (iii) public facilities (iv) sewers (v) parks and recreation facilities and (vi) street improvements of the City of Omaha (the “City”).

**THE BONDS ARE PAYABLE FROM AD VALOREM TAXES, UNLIMITED AS TO RATE AND AMOUNT, LEVIED BY THE CITY AGAINST ALL TAXABLE PROPERTY IN THE CITY. THE FULL FAITH AND CREDIT OF THE CITY ARE PLEDGED TO THE PROMPT PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THE BONDS.**

**MATURITY SCHEDULE**

(on inside cover page)

*This cover page contains information for convenient reference only. It is not a summary of this issue. Investors must read the entire Official Statement to obtain information essential and material to the making of an informed investment decision.*

*The Bonds are being offered when, as and if issued by the City and accepted by the Underwriter, subject to the approval of legality of the Bonds by Kutak Rock LLP, Bond Counsel, and to certain other conditions. It is expected that delivery of the Bonds will be made on or about November 15, 2023, at DTC in New York, New York against payment therefor.*

**OFFICIAL STATEMENT**  
**\$40,000,000**  
**THE COUNTY OF SARPY**  
**IN THE STATE OF NEBRASKA**  
**LIMITED TAX BUILDING BONDS**  
**SERIES 2021**

**Dated: date of delivery**

**Due: June 1, as shown on the inside cover**

The Bonds are issuable in fully registered form and, when initially issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company (“**DTC**”), New York, New York, which will act as securities depository for the Bonds. Purchases of the Bonds will be originally made in book-entry form only, in the principal amount of \$5,000 or any integral multiple thereof, through brokers and dealers who are, or who act through, DTC participants. Beneficial owners of the Bonds will not receive physical delivery of bond certificates so long as DTC or a successor securities depository acts as the securities depository with respect to the Bonds. So long as DTC or its nominee is the registered owner of the Bonds, payments of the principal or redemption price of and interest on the Bonds will be made directly to DTC. Interest is payable on June 1 and December 1 of each year, beginning June 1, 2022. Disbursement of such payments to DTC participants is the responsibility of DTC and disbursement of such payments to the beneficial owners is the responsibility of the DTC participants. Union Bank and Trust Company, Lincoln, Nebraska, is bond registrar and paying agent for the Bonds (the “**Registrar**”). For terms relating to principal and interest payments made to DTC or its nominee or in the event that the use of book-entry form is discontinued, see “**THE BONDS—Book-Entry System.**”

The Bonds are being issued to provide funds necessary (a) to pay the costs of construction, furnishing and equipping of a county correctional facility and other county buildings and related improvements (together, the “**Project**”) and (b) pay certain costs of issuing the Bonds. See “**THE PROJECT**” and “**ESTIMATED SOURCES AND USES OF FUNDS**” herein.

The Bonds are limited obligations of the County payable solely from taxes levied by the County pursuant to Section 23-120, R.R.S. Neb., as amended, in an amount not to exceed 5.2¢ on each \$100 of actual valuation of all the taxable property in the County, subject to the County’s constitutional levy limitation. See “**SECURITY**” and “**NEBRASKA LAWS RELATED TO BUDGETS AND TAXATION.**”



## OMAHA PUBLIC POWER DISTRICT (NEBRASKA)

**\$360,820,000 Electric System Revenue Bonds, 2023 Series A**

**\$188,940,000 Electric System Revenue Bonds, 2023 Series B**

**Dated:** Date of Delivery

**Due:** February 1, as shown on the inside cover page

The Electric System Revenue Bonds, 2023 Series A (the “2023 A Bonds”) and Electric System Revenue Bonds, 2023 Series B (the “2023 B Bonds”) (together, the “2023 Bonds”) will be issued by the Omaha Public Power District (the “District”) in fully registered form in the minimum denomination of \$5,000 and any integral multiple thereof. Interest on the 2023 Bonds will be payable February 1, 2024, and each August 1 and February 1 thereafter. Certain of the 2023 Bonds are subject to optional redemption prior to maturity as described herein. The 2023 Bonds are issued for valid corporate purposes of the District, including paying or reimbursing capital expenditures of the District, refunding a portion of the District’s outstanding Electric System Subordinated Revenue Bonds, 2014 Series AA and 2014 Series CC and commercial paper notes, funding any required reserves and paying the costs and expenses incurred in connection with the issuance of the 2023 Bonds. See “USE OF THE 2023 BOND PROCEEDS.”

The 2023 Bonds, when issued, will be registered in the name of Cede & Co., as Bondholder and nominee for The Depository Trust Company (“DTC”), New York, New York. Purchases of beneficial interests in the 2023 Bonds will be made in book-entry only form. Accordingly, principal of and interest on the 2023 Bonds will be paid by the Bond Fund Trustee acting as the Paying Agent directly to DTC as the Bondholder thereof. Disbursement of such payments to DTC’s Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of DTC’s Participants, as more fully described herein. Any purchaser as a Beneficial Owner of a 2023 Bond must maintain an account with a broker or dealer who is, or acts through, a DTC Participant to receive payment of the principal of and interest on such 2023 Bonds. See “BOOK-ENTRY SYSTEM.”

**Principal of and interest on the 2023 Bonds will be payable on a parity with the other Electric System Revenue Bonds of the District, outstanding, as of August 31, 2023, in the principal amount of \$1,890,015,000, and any other Additional Bonds which hereafter may be issued under Resolution No. 1788, and will be payable from and secured by a pledge of and lien upon the revenues, income, receipts and profits of the Electric System, subject to the prior payment therefrom of the operations and maintenance expenses of the Electric System. See “SECURITY FOR THE 2023 BONDS.” The 2023 Bonds shall not be obligations of the State of Nebraska or of any of its political subdivisions, other than the District, nor shall said State or any of its political subdivisions, other than the District, be liable for the payment of the principal of and interest on the 2023 Bonds. The District has no taxing power.**



\$43,155,000

THE COUNTY OF DOUGLAS, NEBRASKA  
EDUCATIONAL FACILITIES REVENUE BONDS, SERIES 2021A  
(CREIGHTON UNIVERSITY PROJECTS)

**Dated: Date of delivery**

**Due: As shown on the inside cover**

The County of Douglas, Nebraska (the “**County**”) is issuing the above-captioned bonds (the “**Series 2021A Bonds**”) pursuant to Chapter 13, Article 11, Reissue Revised Statutes of Nebraska, as amended (the “**Act**”), a resolution of the County Board of Commissioners (the “**Board**”) duly passed and adopted on July 27, 2021 (the “**Board Resolution**”), and a Trust Indenture, dated August 1, 2021 (the “**Indenture**”), between the County and BOKF, National Association, as trustee (the “**Trustee**”).

The proceeds of the Series 2021A Bonds will be loaned to Creighton University (“**Creighton**”), a non-profit corporation duly organized and existing under the laws of the State of Nebraska, pursuant to a Loan Agreement, dated as of August 1, 2021, by and between the County and Creighton for the purpose of (a) paying certain costs of acquiring, constructing, equipping, and furnishing improvements to Creighton's higher education facilities as described herein (see “THE PROJECT” herein), and (b) paying certain costs of issuing the Series 2021A Bonds.

**The Series 2021A Bonds are limited obligations of the County. The Series 2021A Bonds shall never constitute an indebtedness of the County within the meaning of any constitutional provision or statutory limitation and shall never constitute or give rise to a pecuniary liability of the County. The Series 2021A Bonds shall not be a charge against the County’s general credit or taxing powers.**

## SECURITY FOR THE SERIES 2021A BONDS

### Special, Limited Revenue Obligations

**THE SERIES 2021A BONDS ARE LIMITED OBLIGATIONS OF THE COUNTY. THE SERIES 2021A BONDS SHALL NEVER CONSTITUTE AN INDEBTEDNESS OF THE COUNTY WITHIN THE MEANING OF ANY CONSTITUTIONAL PROVISION OR STATUTORY LIMITATION AND SHALL NEVER CONSTITUTE OR GIVE RISE TO PECUNIARY LIABILITY OF THE COUNTY. THE SERIES 2021A BONDS SHALL NOT BE A CHARGE AGAINST THE COUNTY'S GENERAL CREDIT OR TAXING POWERS.**

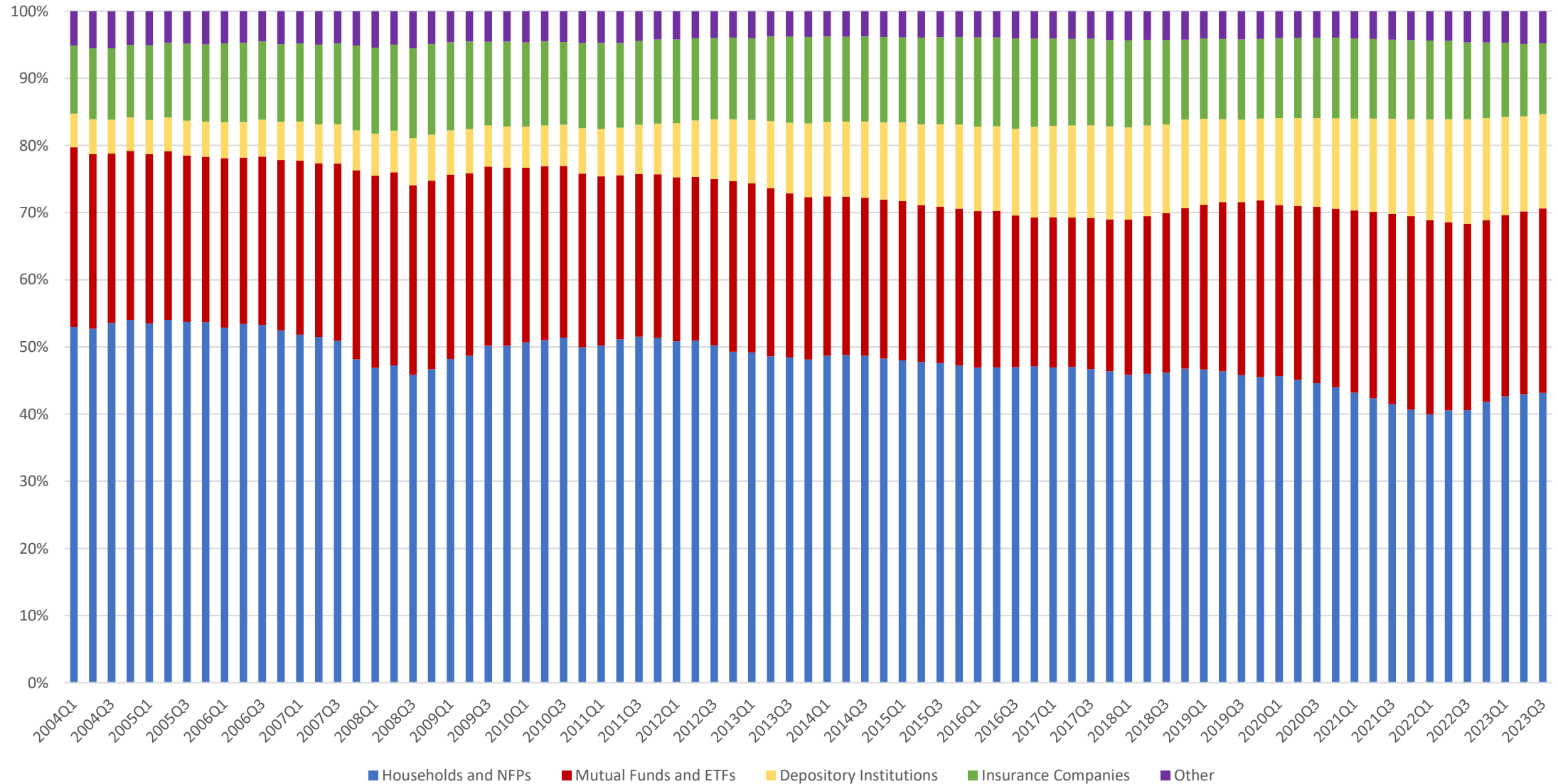
The Series 2021A Bonds and the interest thereon are special, limited revenue obligations of the County, payable solely from payments to be made by Creighton under the Loan Agreement, the Note and certain other funds held by the Trustee under the Indenture, and are secured under the Indenture and Loan Agreement as described herein.

### The Loan Agreement

The County will loan the proceeds of the Series 2021A Bonds to Creighton pursuant to the Loan Agreement. To evidence its obligation to repay the funds so loaned to it by the County, Creighton will execute and deliver the Note payable to the County. The County will assign its rights under the Loan Agreement and the Note to the Trustee. To secure its obligation under the Note and Loan Agreement, Creighton is granting a security interest in, lien upon, and pledge of substantially all of Creighton's unrestricted receipts, revenues, and income ("**Gross Revenues**"), which security interest and pledge equally and ratably secure the Series 2021A Bonds, the Prior Bonds (as hereinafter defined; and as defined in the Loan Agreement), any Additional Bonds (as defined in the Loan Agreement), and any subsequent indebtedness of Creighton that it may hereafter secure by a pledge of Gross Revenues (including the Series 2021B Bonds). See APPENDIX A – "CREIGHTON UNIVERSITY GENERAL AND FINANCIAL INFORMATION – LONG-TERM DEBT AND RELATED COVENANTS – Schedule of Long-Term Debt Obligations" and " – Summary of Debt Service".

Under the Loan Agreement and the Note, Creighton is required to make payments to the Trustee for deposit into the bond fund applicable to the Series 2021A Bonds in amounts sufficient to pay when due the principal of, redemption premium, if any, and interest on the Series 2021A Bonds and to make certain other payments. Creighton's obligation to make payments and to pay other amounts under the Loan Agreement is absolute and unconditional without any abatement or diminution thereof. The Loan Agreement also contains covenants of Creighton with respect to, among other things, the maintenance of its corporate existence; the maintenance and use of its property; compliance with laws and regulations; payment of taxes; licenses and permits; and insurance. For more information about the Loan Agreement, see APPENDIX C – "SUMMARIES OF CERTAIN PRINCIPAL DOCUMENTS – SUMMARY OF THE LOAN AGREEMENT".

# Who Owns Muni Bonds?



Data: Federal Reserve (Z.1 Financial Accounts)

# Tax Exemption

- *Interest income* from municipal bonds is **generally** tax-exempt
  - Federal taxation
  - State taxation in the state in which it was issued\*
  - Oklahoma, Illinois, Iowa, and Wisconsin tax in-state muni interest
- Capital gains are not tax-exempt

Taxable Bond:  $\text{Interest Income} (1 - \text{Marginal Tax Rate}) = \text{After-Tax Interest Income}$

Tax-Exempt Bond:  $\text{Interest Income} = \text{After-Tax Interest Income}$

$$\text{Tax-Equivalent Yield} = \frac{\text{Tax-Exempt Yield}}{(1 - \text{Marginal Tax Rate})}$$



\*Under federal law, states are not allowed to tax interest income on obligations issued by Puerto Rico, Guam, or the US Virgin Islands

# Tax-Equivalent Yield Example

**BERKSHIRE  
HATHAWAY**



Bond Choices	Berkshire Hathaway Corporate	City of Omaha Sewer Revenue
Coupon	3.125%	4%
Credit Rating	S&P AA / Moody's Aa2	S&P AA / Moody's Aa2
Maturity	3/15/2026	4/1/2026
Yield (as of 1/19/2024)	4.55%	3.02%

Investor (married filing jointly)	
Annual Income (NE 75 <sup>th</sup> percentile)	\$125,000
Marginal Federal Tax Rate	22%
Marginal Nebraska Rate	6.84%

$$\text{Tax-Equivalent Yield} = \frac{\text{Tax-Exempt Yield}}{(1 - \text{Marginal Tax Rate})}$$

$$\text{Tax-Equivalent Yield} = \frac{3.02\%}{(1 - 0.2884)} = 4.24\%$$

# Tax-Equivalent Yield Example

Bond Choices	Berkshire Hathaway Corporate	City of Omaha Sewer Revenue
Coupon	3.125%	4%
Credit Rating	S&P AA / Moody's Aa2	S&P AA / Moody's Aa2
Maturity	3/15/2026	4/1/2026
Yield (as of 1/19/2024)	4.55%	3.02%

Marginal Income Tax Rate (Federal)	Married Filing Jointly
10%	\$0 - \$23,200
12%	\$23,201 - \$94,300
22%	\$94,301 - \$201,050
24%	\$201,051 - \$383,900
32%	\$383,901 - \$487,450
35%	\$487,451 - \$731,200
37%	\$731,201 or higher

$$\text{Taxable Yield} (1 - \text{Tax Rate}) = \text{Tax-Exempt Yield}$$

$$4.55\% (1 - \text{Tax Rate}) = 3.02\%$$

$$\text{Tax Rate} = 33.63\%$$

Nebraska Marginal Rate = 6.84%

# Why are some munis not tax exempt?

## Arbitrage Arrangements

- Bonds issued to take advantage of yield advantage of tax-exempt borrowing

Maturity (years)	US Treasury Yield	AAA Muni Yield
1	4.65%	3.32%
5	3.84%	2.83%
10	3.96%	3.03%
30	4.20%	3.43%

## Private Activity Bonds

- Tax exemption is supposed to benefit state and local governments
- But also allowed for “qualified” private activities (utilities, communications, transportation, private education, etc.)

## Advance Refundings

- Refinancing prior to first call date
- One allowed prior to 2018, now not allowed unless refunding issue is taxable

**OFFICIAL STATEMENT DATED FEBRUARY 27, 2020**

*The interest on the Bonds (including any original issue discount properly allocable to an owner thereof) is included in gross income for federal income tax purposes and is not exempt from Nebraska income taxation. See “TAX MATTERS” in this Official Statement.*

NEW ISSUE - BOOK ENTRY ONLY  
TAXABLE

RATING: S&P “AA+”

**\$6,365,000**

**BELLEVUE CITY MUNICIPAL BUILDING CORPORATION**

**(A Nebraska Not-for-Profit Corporation)**

**CITY OF BELLEVUE, NEBRASKA**

**REFUNDING BONDS (CONVENTION CENTER PROJECT), TAXABLE SERIES 2020**

Dated: Date of Delivery

Due: September 15 as shown below

The Refunding Bonds (Convention Center Project), Taxable Series 2020 (the “Bonds”) are issuable as fully registered bonds and when initially issued will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York, (“DTC”). DTC will act as securities depository for the Bonds. Purchases of beneficial ownership interest in the Bonds will be made in book-entry form only, in \$5,000 principal amounts or integral multiples thereof. Beneficial Owners of the Bonds will not receive physical delivery of bond certificates evidencing their ownership interest in the Bonds so long as DTC or a successor securities depository acts as the securities depository with respect to the Bonds. Interest on the Bonds is payable each March 15 and September 15 commencing September 15, 2020, as more fully described herein. So long as DTC or its nominee is the registered owner of the Bonds, payments of the principal, premium, if any, and interest on the Bonds will be made directly to DTC. Disbursements of such payments to DTC Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of DTC Participants (see “**BOOK-ENTRY ONLY SYSTEM**” herein), at the office of UMB Bank, N.A., West Des Moines, Iowa, as Trustee, Paying Agent and Registrar (“Trustee”).

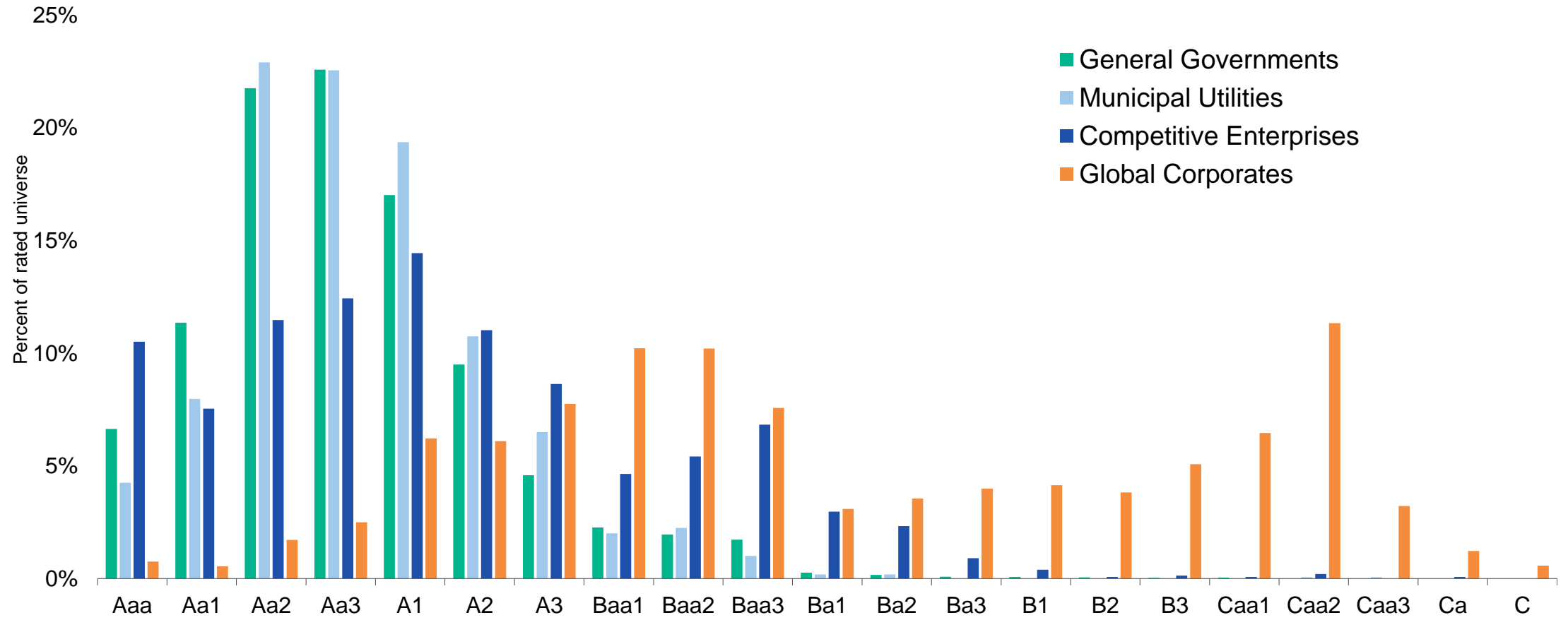
The Bonds are being issued to refund \$6,365,000 principal amount of Building Bonds (Convention Center Project), Taxable Series 2016, date of original issue – June 1, 2016, (the “Refunded Bonds”), which Refunded Bonds were issued to finance the costs of acquiring, constructing and equipping certain convention center facilities leased by the Bellevue City Municipal Building Corporation (the “Issuer”) to the City of Bellevue, Nebraska (the “City”)

The Bonds maturing on or after September 15, 2025, are redeemable by the Issuer at the direction of the City anytime on and after March 31, 2025. r 15, 2025, are redeemable by the Issuer at the direction of the City anytime on and after March 31, 2025. See “**THE BONDS - Redemption Provisions**” herein.

The Bonds shall not be a debt of the City of Bellevue or a pledge of its faith and credit but, together with interest thereon, shall be payable solely out of the Rental Payments paid by the City under terms of a Lease-Purchase Agreement, dated as of December 23, 2014, entered into between the Issuer and the City, as amended by that First Addendum to Lease-Purchase Agreement, dated as of June 1, 2016, and as further amended by that Second Addendum to Lease-Purchase Agreement, dated as of March 31, 2020, and, to the extent received by the Trustee, interest earnings, insurance proceeds and condemnation awards. The Bonds have been issued pursuant to the terms of a Trust Indenture and Security Agreement, dated as of March 31, 2020, between the Issuer and the Trustee. The Basic Rent payable by the City is an obligation of the City payable, unless paid from other sources, out of the funds of the City which may be raised, among other sources, by taxes levied by valuation on all taxable property, except intangible property, in the City subject to the City’s statutory levy limitations. See “**SECURITY FOR THE BONDS**” herein.

# Default Risk

Rating distributions by sector: Municipal issuers by sector vs. global corporate issuers, year-end 2022



# Default by sector: 1970-2022

Purpose	Number of defaults	Percentage	Default volume (million USD)	Default volume as %
City	8	7.0%	2,684	3.7%
County	5	4.4%	444	0.6%
K-12 public school district	2	1.8%	10	0.0%
Special district	3	2.6%	9	0.1%
State governments	11	9.6%	50,082	69.4%
<b>GENERAL GOVERNMENTS</b>	<b>29</b>	<b>25.4%</b>	<b>53,318</b>	<b>73.9%</b>
Electric utility	3	2.6%	11,343	15.7%
Mass transit	1	0.9%	439	0.6%
Toll facility	2	1.7%	216	0.3%
Water/sewer utility	2	1.7%	3,109	4.3%
<b>MUNICIPAL UTILITIES</b>	<b>8</b>	<b>7.0%</b>	<b>15,107</b>	<b>20.9%</b>
Charter school	2	1.7%	28	0.0%
Higher education	2	1.7%	82	0.1%
Hospitals & health service providers	23	20.0%	2,455	3.4%
Hotel	2	1.7%	139	0.2%
Housing	46	40.0%	898	1.2%
Not-for-profit	2	1.7%	86	0.1%
Private K-12	1	0.9%	10	0.0%
<b>COMPETITIVE ENTERPRISES</b>	<b>78</b>	<b>67.8%</b>	<b>3,699</b>	<b>5.1%</b>
<b>TOTAL</b>	<b>115</b>	<b>100.0%</b>	<b>72,124</b>	<b>100.0%</b>

# Cumulative default rates: 2013-2022

## Municipals

Rating	Average cohort count	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Aaa	827	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aa	7,148	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
A	4,962	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Baa	869	0.03%	0.06%	0.14%	0.27%	0.37%	0.41%	0.47%	0.48%	0.48%	0.48%
Ba	164	0.05%	0.27%	0.70%	1.01%	1.03%	1.03%	1.03%	1.03%	1.03%	1.03%
B	30	0.98%	2.36%	4.52%	5.35%	6.05%	6.05%	6.05%	6.05%	6.05%	6.05%
Caa-C	21	10.11%	19.18%	24.86%	26.31%	26.76%	26.76%	26.76%	26.76%	26.76%	26.76%
Investment-grade	13,807	0.00%	0.01%	0.01%	0.02%	0.03%	0.03%	0.03%	0.04%	0.04%	0.04%
Speculative-grade	216	1.09%	2.24%	3.34%	3.82%	3.97%	3.97%	3.97%	3.97%	3.97%	3.97%
All rated	14,088	0.02%	0.04%	0.06%	0.07%	0.08%	0.08%	0.09%	0.09%	0.09%	0.09%

## Global Corporates

Rating	Average cohort count	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Aaa	55	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aa	300	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
A	1,275	0.02%	0.04%	0.05%	0.06%	0.09%	0.13%	0.16%	0.17%	0.21%	0.24%
Baa	1,773	0.11%	0.25%	0.47%	0.71%	0.98%	1.27%	1.58%	2.16%	2.96%	3.52%
Ba	772	0.56%	1.54%	2.77%	4.03%	5.69%	7.38%	9.49%	11.51%	14.19%	16.99%
B	1,002	1.67%	4.69%	8.25%	11.88%	15.21%	18.55%	22.18%	26.09%	30.60%	32.52%
Caa-C	1,375	6.63%	12.65%	18.39%	23.62%	28.41%	32.89%	36.78%	39.76%	42.44%	45.63%
Investment-grade	3,403	0.06%	0.14%	0.26%	0.39%	0.53%	0.70%	0.86%	1.16%	1.56%	1.85%
Speculative-grade	3,150	3.54%	7.25%	10.99%	14.47%	17.71%	20.80%	23.91%	26.84%	30.16%	32.53%
All rated	6,553	1.69%	3.39%	5.04%	6.50%	7.81%	9.00%	10.15%	11.28%	12.58%	13.48%

# Special Features of Muni Bonds

## Data

- Mergent Fixed Income Securities Database
- New issues 01/01/2010 – 12/31/2020
- Fixed coupon, USD, not 144a
- Issue size > \$1 million for corporates
- Deal size > \$1 million for munis

	Corporate	Municipal
Cusips	69,891	1,415,435
% Callable	55.18%	6.52%
% Putable	0.02%	0.25%
% Insured	0.00%	16.41%
% Bank Qualified		38.16%
% Tax Exempt		91.07%

	Corporate		Municipal	
	Mean	Median	Mean	Median
Original Maturity	6.72 years	5.01 years	9.89 years	8.77 years
Call Protection	2.82 years	1.01 years	8.11 years	9.17 years
Offering Amount	552,530,265	50,000,000	3,204,047	625,000
Offering Price	99.12	100	105.45	102.76

# Taxation of Capital Gains

Taxation of capital gains is not waived for munis!

How much is the tax? It depends.

De Minimis Threshold =  $0.25\% \times \text{par value} \times \text{full years until maturity}$

If muni bond is purchased in the secondary market at a discount and held to maturity:

- If the discount was less than de minimis: owe tax on gains at capital gains rate
- If the discount was greater than de minimis: owe tax on gains at **ordinary income rate**

# Federal Tax Brackets: 2024

Marginal Income Tax Rate	Single	Married Filing Jointly	Capital Gains Rate
10%	\$0 – \$11,600	\$0 - \$23,200	0%
12%	\$11,601 - \$47,150	\$23,201 - \$94,300	0%
22%	\$47,151 - \$100,525	\$94,301 - \$201,050	15%
24%	\$100,526 - \$191,950	\$201,051 - \$383,900	15%
32%	\$191,951 - \$243,725	\$383,901 - \$487,450	15%
35%	\$243,726 - \$609,350	\$487,451 - \$731,200	20%
37%	\$609,351 or more	\$731,201 or higher	20%

# Interest Rates and Bond Prices

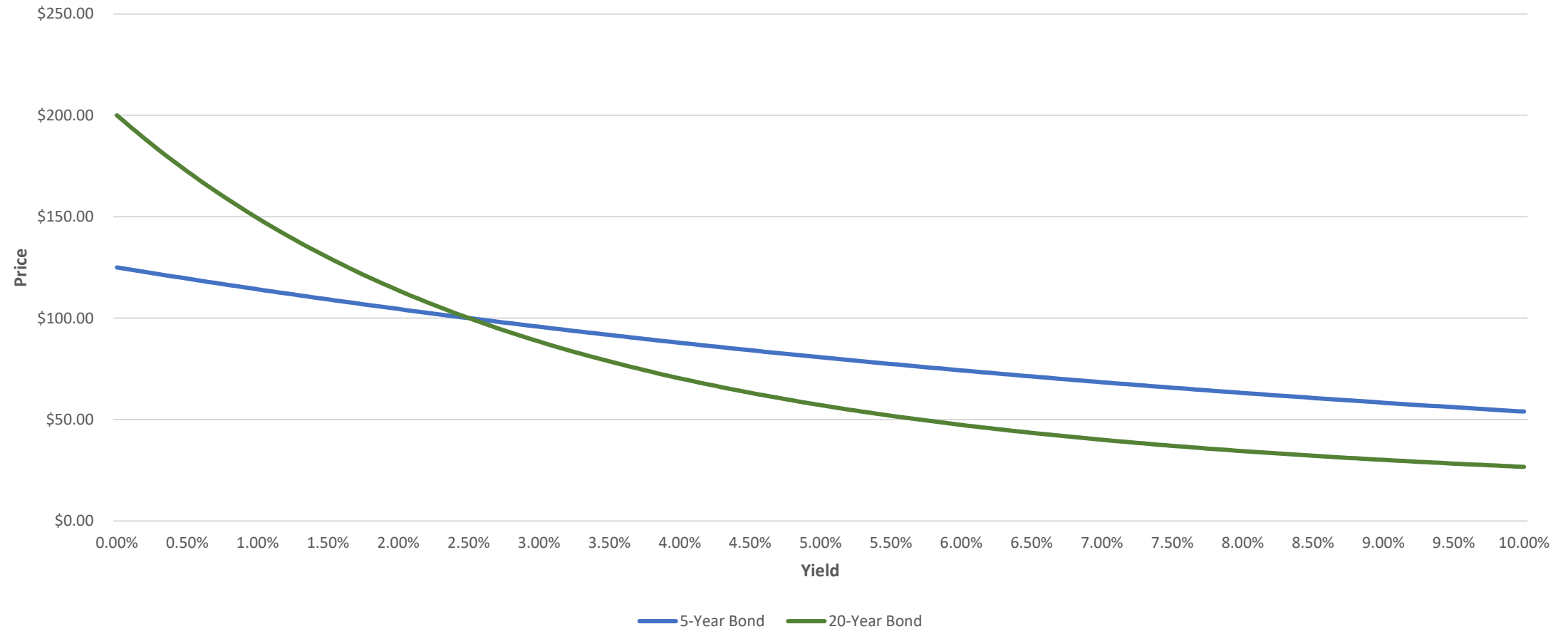
$$\text{Bond Value} = \frac{\text{CPN}}{(1 + \text{yield})^1} + \frac{\text{CPN}}{(1 + \text{yield})^2} + \dots + \frac{\text{CPN} + \text{PAR}}{(1 + \text{yield})^N}$$

Example:

5% coupon semiannual payments

5 years to maturity

20 years to maturity



# Municipal Bond Yield to Maturity S&P Municipal Bond Index



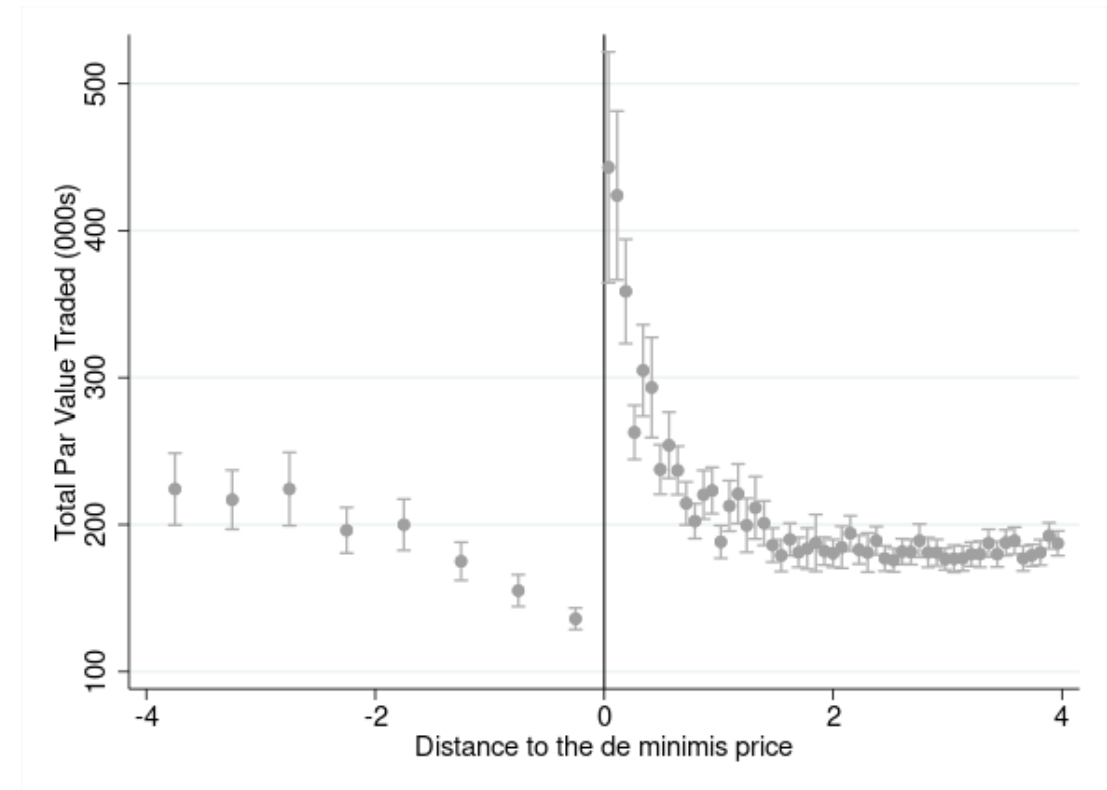
# Nebraska Munis

Bond	Maturity	Rating	Coupon	Last Trade	Yield	Price	De Minimis
Omaha NE Public Pwr Dist Elec	02/01/2032	AA	3%	12/23/2023	3.82%	<b>94.33</b>	<b>98.00</b>
Lancaster Cnty NE Sch Dist #1	01/15/2043	AA	3%	01/17/2024	4.18%	<b>84.64</b>	<b>95.25</b>
City of Kearney NE	05/15/2036	A+	4%	01/19/2024	3.57%	101.33	97.00
Elkhorn Public Schools	12/15/2030	AA-	5%	01/11/2024	2.51%	113.60	98.50
Scotts Bluff Cnty NE Hosp Auth	02/01/2037	BB-	5.25%	09/25/2023	6.25%	<b>91.03</b>	<b>96.75</b>

- Higher coupons help prevent bonds from falling into de minimis territory as interest rates increase
- Credit risk matters too!

# Secondary Market Liquidity of Discount Municipal Bonds: Academic Evidence

- Municipal bonds trading below the de minimis threshold trade at prices lower than can be explained by the additional taxes alone (Ang, Bhansali, and Xing, 2010)
- Municipal bond mutual funds begin heavily selling bonds that are approaching par value due to increasing interest rates (Bagley, Gissler, Hiteshew, and Ivanov, 2023)
- The low price of municipal bonds below the de minimis threshold appears to be a convenience premium (Fleckenstein and Longstaff, 2023)



**Par Value Traded Around the De Minimis Threshold**  
Bagley, Gissler, Hiteshew, and Ivanoff (2023)

Questions?

