New Investment Option in Illinois:

Corporate Notes

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Public Act 100-0752 (HB 4573)

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- Amends the Illinois Public Funds Investment Act
- Passed both the House and Senate on June 27
- Signed into law by Governor on August 10
- Allows IL public entities to invest in corporate obligations from 270 days to 3 years
  - Previously limited to 270 days
  - Issuing Corporations must be organized in the United State and have assets exceeding $500 million
  - No more than 1/3 of the public entity's funds may be invested in corporate obligations

Public Act 100-0752 (HB 4573)

- Corporate Note: An unsecured debt instrument issued by a corporation with a maturity of greater than one year and less than ten years
- Why expand the Illinois state statutes to include high-grade corporate notes in the Illinois Public Funds Investment Act?
    1. Diversification: add another investment type for Illinois governmental investors
    2. To improve overall investment returns
    3. It has been successfully done in other states throughout the country

Public Act 100-0752 (HB 4573)

- Only requires a few minor changes to the existing language that currently allows for short-term corporate obligations

In ~~short term~~ obligations of corporations organized in the United States with assets exceeding $500,000,000 if (i) such obligations are rated at the time of purchase at one of the 3 highest classifications established by at least 2 standard rating services and which mature not later than ~~270 days~~ 3 years from the date of purchase, (ii) such purchases do not exceed 10% of the corporation's outstanding obligations and (iii) no more than one-third of the public agency's funds may be invested in short-term obligations of corporations

Overview of the Corporate Sector

Corporate Notes

Issuer:	Private and publicly owned corporations
Credit Quality:	Varies by issuer
Term of Maturity:	1 - 40+ years
Liquidity:	Moderate
Return:	Increased return potential relative to other fixed income securities, depends on credit and structure
Caution:	Unsecured promissory note Credit analysis required

Yield Environment

Yield Curves as of October 15, 2018

Maturity	Treasury	Federal Agency	AA Corporate	A Corporate
3-Month	2.27%	2.24%	2.52%	2.64%
6-Month	2.46%	2.33%	2.60%	2.74%
1-Year	2.66%	2.60%	2.77%	2.92%
2-Year	2.86%	2.82%	3.09%	3.25%
3-Year	2.94%	2.97%	3.24%	3.43%
5-Year	3.01%	3.08%	3.47%	3.64%

Source: Bloomberg BVAL yield curves for Treasury and Corporate, as of 10/15/18. TradeWeb for Federal Agency yields. 3 and 6 month corporate yields from commercial paper; A-1+ for AA and A-1 for A. Yields are for indicative purposes only; actual yields may vary by issue.

Corporate Long-Term Ratings Definitions

Investment Grade

S&P	Moody's	Fitch	Definitions (by Moody's)
AAA	Aaa	AAA	Obligations rated Aaa are judged to be of the highest quality, with minimal credit risk.
AA	Aa	AA	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.
A	A	A	Obligations rated A are considered upper-medium grade and are subject to low credit risk.
BBB	Baa	BBB	Obligations rated Baa are subject to moderate credit risk. They are considered medium grade and as such may possess certain speculative characteristics.
BB	Ba	BB	Obligations rated Ba are judged to have speculative elements and are subject to substantial credit risk.
B	B	B	Obligations rated B are considered speculative and are subject to high credit risk.
CCC	Caa	CCC	Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.
CC	Ca	CC	Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.
C	C	C	Obligations rated C are the lowest rated class and are typically in default, with little prospect for recovery of principal or interest.

Source: Moody's Investor Services, Standards and Poor's, Fitch Ratings.

AAA/AA Rated Representative Issuer List

Top 10 Issuers	# of Issues	Amount Outstanding (millions)	% of Corp Index	Moody's	S&P	Fitch
Apple	19	$25,400	1.01%	Aa1	AA+	-
Microsoft	13	$19,250	0.76%	Aaa	AAA	AA+
Westpac Banking	12	$15,520	0.61%	Aa3	AA-	AA-
Royal Bank of Canada	10	$13,450	0.53%	A1	AA-	AA
Toronto-Dom. Bank	9	$13,100	0.52%	Aa2	AA-	AA-
Shell International	9	$12,750	0.51%	Aa2	A+	AA-
Chevron	11	$11,500	0.46%	Aa2	AA-	WD
Natl. Australia Bank	9	$9,500	0.38%	Aaa	AA+	WD
Exxon Mobil	5	$8,150	0.32%	Aaa	AA+	WD
Coca-Cola	7	$7,574	0.30%	Aa3	A+	A

Representative list for informational purposes only; not an investment recommendation.
Source: BofA Merrill Lynch 1-5 Year U.S. Corporate Index, as of 12/31/2017.

Denotes foreign issuer

A Rated Representative Issuer List

Top 10 Issuers	# of Issues	Amount Outstanding (millions)	% of Corp Index	Moody's	S&P	Fitch
Goldman Sachs	21	$45,800	1.88%	A3	BBB+	A
J.P. Morgan Chase	18	$42,100	1.73%	A3	A-	A+
Morgan Stanley	16	$36,016	1.48%	A3	BBB+	A
Bank of America	17	$35,864	1.48%	A3	A-	A
Citigroup	16	$30,114	1.21%	Baa1	BBB+	A
Wells Fargo	11	$26,100	1.05%	A2	A-	A+
Oracle	8	$16,994	0.68%	A1	AA-	A+
HSBC	8	$16,900	0.69%	A2	A	AA-
Toyota	17	$16,700	0.67%	Aa3	AA-	A
Cisco Systems	10	$15,750	0.63%	A1	AA-	-

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Letter Rating Migration Rates

2017 One-Year Letter Rating Migration Rates

From\To:	Aaa	Aa	A	Baa	Ba	B	Caa	Ca-C	Default	WR
Aaa	100.0%	-	-	-	-	-	-	-	-	-
Aa	-	75.1%	20.2%	-	-	-	-	-	-	4.7%
A	-	1.4%	90.1%	3.9%	0.2%	-	0.1%	-	-	4.4%
Baa	-	0.1%	2.9%	90.1%	1.3%	0.3%	-	-	-	5.4%
Ba	-	-	-	6.8%	82.1%	4.0%	0.1%	-	0.2%	6.9%
B	-	-	-	0.1%	7.2%	72.2%	5.5%	-	0.3%	14.8%
Caa	-	0.1%	-	-	0.1%	5.0%	70.4%	3.1%	3.8%	17.7%
Ca-C	-	-	-	-	-	0.9%	19.5%	35.8%	27.6%	16.3%

Average One-Year Letter Rating Migration Rates, 1970-2017

From\To:	Aaa	Aa	A	Baa	Ba	B	Caa	Ca-C	Default	WR
Aaa	87.7%	7.9%	0.6%	0.1%	0.0%	0.0%	-	-	-	3.7%
Aa	0.8%	85.2%	8.5%	0.4%	0.1%	0.0%	0.0%	-	0.0%	5.0%
A	0.1%	2.5%	86.8%	5.4%	0.5%	0.0%	0.0%	-	0.1%	4.6%
Baa	0.0%	0.1%	4.1%	85.7%	3.8%	0.7%	0.2%	0.0%	0.2%	5.2%
Ba	0.0%	0.0%	0.4%	6.1%	76.3%	7.2%	0.7%	0.1%	0.9%	8.2%
B	0.0%	0.0%	0.1%	0.5%	4.8%	73.5%	6.6%	0.5%	3.3%	10.7%
Caa	-	0.0%	0.0%	0.1%	0.3%	6.5%	67.9%	2.9%	8.0%	14.4%
Ca-C	-	-	0.1%	-	0.6%	2.3%	8.9%	39.4%	26.7%	22.1%

Source: Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2017.

Important Principals When Investing in Corporate Securities

Policies/Procedures	Credit Review
	Initial
• Understand and follow all applicable laws, statutes and policies • Implement investment and credit policies that reflect organizational objectives, priorities, and appropriate level of risk tolerance • Do not rely on ratings alone, rather include what has been researched and understood. • Ensure prudent diversification (by sector & issuer) • Establish escalation and action procedures in advance of downgrades or other credit problems • Conduct thorough due diligence and document review of issues that have unique complications or structure (e.g. municipals, asset-backed, mortgage-backed, 144A, structured notes, etc.…)	• Develop and implement a formal credit review, approval, and monitoring process • Establish clear protocols and lines of authority for credit-related decision making • Work from an established “approved list” that has been fully vetted by the review committee **Ongoing** • Establish a periodic review cycle (quarterly review of financials, annual due diligence) • Understand how macroeconomic conditions, industry dynamics, and issue specific factors affect credit quality • Closely watch and monitor what you own, taking action, if necessary, to protect the safety of the portfolio

Potential Risks of Investing in Corporate Securities

- Credit/Default Risk
  - Risk that an issuer will be unable to meet its financial obligations
- Market Value Risks
  - Credit spread: risk of financial loss resulting from changes in credit spreads used in the marking-to-market of a fixed income product
  - Downgrade: risk that a bond's price will decline due to a downgrade in its credit rating

Risks can be mitigated with the appropriate procedures, policies, and limitations in place

Investing in Corporates – Key Considerations

Before investing in corporate securities there are several key elements for boards to consider for their investment policy and overall investment program:

- Minimum credit rating requirements (“AAA” or “AA” or “A”) by two credit agencies
  - Balance needs of different levels of sophistication
  - Language to include “based on settlement date”
- Concentration limit on overall portfolio (i.e., current limit on commercial paper investments is 1/3 of the total portfolio)
- Issuer limitation (limit the amount of exposure to any one issuer in the overall portfolio)
- In Depth Credit Analysis
  - Not enough to just look at the credit ratings
  - Consider hiring an outside investment adviser

Going Beyond Credit Ratings

Issuer Analysis	Macro Analysis
• Balance sheet analysis • Earnings: Actual and projections • Asset quality and impairments • Corporate governance • Price movement of fixed income and equity securities • Monitor credit default swap levels • Trading volume • Analysts’ recommendations	• Industry trends • Competitive environment • Business cycle • Regulatory environment • Rating agency actions • Sovereign credit developments

Summary

- Public Act 100-0752 (HB 4573)
  - Amends the Public Funds Investment Act
  - Allows IL public entities to invest in corporate obligations from 270 days to 3 years
- Potential benefits of corporates:
  - Enhance risk-adjusted returns when used prudently
  - Increase portfolio diversification by sector
  - Wide range of issuers and maturity
- Potential credit risks:
  - Default risk
  - Downgrade risk
- Establish and adhere to prudent credit principles to reduce risk

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