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JANUARY 2016

ISSUE BRIEF

Still in the Penalty Box: The $53M "Financial Condition Penalty" on Illinois' January 2016 Bond Sale

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ABSTRACT: The state of Illinois recently sold its first bond issue since the Illinois Supreme Court struck down the pension reform legislation in May 2015 and during a period when the state is still without a budget - both of which contributed to its recent credit rating downgrades. The state's return to the bond markets amid its deteriorating fiscal position provides an opportunity to empirically estimate one of the costs of the state's current financial condition. This Policy Brief calculates what I am calling the "financial condition penalty" the state earned on this bond sale. This calculation is made based on counterfactual analysis that assumes the state sold these bonds at the relative prices received on its bonds 10 years ago when its credit ratings were much higher. This penalty amounted to nearly $53 million on this bond issue. Assuming the state does not improve its financial condition, the annual dollar amount of this penalty will grow substantially in the future as the state needs to increase its use of debt to finance its sizeable infrastructure needs.

INTRODUCTION

Like most government and business entities, the state of Illinois often uses debt to finance its capital activities. These capital activities mainly entail infrastructure projects such as the building and major maintenance of roads, bridges, and buildings. The majority of the state's capital debt comes from the sale of general obligation bonds. The state pays these bonds back with interest over as long as 25 years. The price the state receives on its bonds is based on a number of factors including its general creditworthiness in the eyes of bond investors. All else equal, if the state's creditworthiness declines, it receives a lower price on its bonds than it otherwise would. That is, as with consumers, it costs the state more to borrow money when its credit rating is lower. Thus, the price on state bonds provides a quantitative measure of the impact of the state's fiscal condition.

The state of Illinois returned to the bond markets on January 14, 2016 when it sold $480 million in general obligation bonds (the *"2016 Bonds").* The last time the state issued debt was May 2014 when it sold $750 million in general obligation bonds (the *"2014 Bonds"*). The 2014 Bonds were sold after passage of the state's controversial 2013 pension reform legislation that aimed to reduce the pension obligations of the state. The state received a relative higher price on the 2014 Bonds compared to previous sales as the pension reform legislation improved the credit in the eyes of the state's bond investors.[1] Conversely, the state sold its 2016 Bonds after the Illinois Supreme Court struck down the 2013 pension reform law[2] in May 2015 and after credit downgrades from the rating agencies Moody's and Fitch, which reflected a worsening fiscal condition of the state.

The credit downgrades the state received in 2015 were part of a continuing trend of downgrades that has resulted in Illinois becoming the lowest credit-rated state in the nation. Table 1 shows this

[1] Luby, Martin J. (September, 2015). State of Illinois Debt Affordability Report. University of Illinois Institute of Government and Public Affairs. Available at: http://igpa.uillinois.edu/system/files/State-of-Illinois-Debt-Affordability-Report-IGPA.pdf

[2] *Heaton et al. v. Quinn.* 2015 IL 118585. Illinois Supreme Court. Filed May 8, 2015. Available at http://www.illinoiscourts.gov/opinions/supremecourt/2015/118585.pdf

downgrade trend over the last 17 years. The state's current credit ratings are Baa1, A- and BBB+ from Moody's, Standard and Poor's and Fitch, respectively.

Table 1: Recent history of state of Illinois General Obligation Bond credit ratings ("red"=downgrade, "green"=upgrade)

	Standard and Poor's	Moody's	Fitch
1998	AA	Aa2	AA
1999	AA	Aa2	AA
2000	AA	Aa2	AA+
2001	AA	Aa2	AA+
2002	AA	Aa2	AA+
2003	AA	Aa3	AA
2004	AA	Aa3	AA
2005	AA	Aa3	AA
2006	AA	Aa3	AA-
2007	AA	Aa3	AA
2008	AA	Aa3	AA-
2009	A+	A2	A
2010	A+	A2	A
2011	A+	A1	A
2012	A	A2	A
2013	A-	A3	A-
2014	A-	A3	A-
2015	A- (negative outlook)	Baa1 (negative outlook)	BBB+ (stable outlook)

Sources: Merriman (2012); Pierog (2014); State of Illinois Comptroller (2015); $480,000,000 State of Illinois General Obligation Bonds, Series of January 2016 Preliminary Official Statement

The state's return to the bond markets amidst its deteriorating fiscal position provides an opportunity to empirically estimate one of the costs of the state's current financial condition. In many contexts, estimating the additional costs caused by the state's weak financial condition is not easy. For instance, it is often difficult to determine how much premium state suppliers may add to a proposal when they bid for a state contract. However, the relatively transparent municipal bond market naturally allows for a before and after comparison of the price for state debt.[3] This Policy Brief relies on counterfactual analysis of the state's 2016 bond sale to provide a quantitative estimate of what I am calling the "financial condition penalty" that the state earned on its 2016 Bonds.

COUNTERFACTUAL METHODOLGY AND ANALYSIS

The counterfactual used in this analysis is the state's credit ratings from 10 years ago and the relative prices it received on the bonds it sold then, namely the $325 million General Obligation Bonds, Series of January 2006 (the *"2006 Bonds"*). The state's credit ratings 10 years ago were much higher (Aa3, AA and AA) than its current ratings (Baa1, A-, BBB+) as rated by Moody's, Standard and Poor's, and Fitch, respectively. The counterfactual analysis assumes that the state of Illinois sold its 2016 Bonds at the relative prices that it received 10 years ago on its 2006 Bonds before Illinois' fiscal challenges became more acute and its credit ratings declined. It then compares the dollar amount the state would have received for the 2016 Bonds assuming these relative 2006 prices to the dollar amount it actually received from the sale of the 2016 Bonds.

Before detailing the results of the counterfactual analysis, consider how municipal bond pricing works. Each bond in a bond issuance carries a coupon interest rate and yield. The coupon interest rate determines the amount of annual interest on each bond. The yield effectively represents the rate of return an investor receives on the bonds taking into account the interest payments and any dollar premium or discount the investor pays for the bond. It also represents the financing cost of the bond

[3] The municipal bond market includes bonds sold by state and local governments

to the state taking into account the aforementioned premium or discount. The yield in conjunction with the maturity date, coupon rate and timing of interest payments determines the dollar bond price an investor pays for the bond and, thus, the dollar amount the state receives for the bond. The yield determines whether the investor pays a premium (i.e., an amount greater than the par amount) or a discount (i.e., an amount less than the par amount) for the bond.[4] All else equal, the higher the yield, the lower the price for the bond, and vice versa.

Table 2 *(following page*) provides sale details for each bond maturity of the state's 2016 Bonds. Columns B and C show the maturity date and par amount of each bond maturity. Columns D and E provide the coupon rate and bond yield for each bond maturity. Columns J and K show the percentage and dollar price the state received for each bond maturity. The total dollar amount the state received from the sale of the 2016 Bonds was **$514,971,072**.

[4] Some municipal bonds are eligible to be redeemed ("called") prior to the maturity date. Some of these bonds may be priced to their call date rather than their maturity date.

Table 2:
$480,000,000 State of Illinois, General Obligation Bonds, Series of January 2016
Actual Bond Sale Pricing

A	B	C	D	E	F	G	H	I	J	K
Year	Date	Amount	Coupon	Yield	MMD AAA Yield	IL to AAA MMD Yield Spread	Call Date	Call Price	Price (%)	Price ($)
1	1/1/2017	19,200,000	5.00%	1.15%	0.48%	0.670%			103.552%	19,881,984
2	1/1/2018	19,200,000	5.00%	1.75%	0.73%	1.020%			106.141%	20,379,072
3	1/1/2019	19,200,000	5.00%	2.00%	0.87%	1.130%			108.496%	20,831,232
4	1/1/2020	19,200,000	5.00%	2.20%	0.98%	1.220%			110.486%	21,213,312
5	1/1/2021	19,200,000	5.00%	2.40%	1.09%	1.310%			112.020%	21,507,840
6	1/1/2022	19,200,000	5.00%	2.60%	1.20%	1.400%			113.109%	21,716,928
7	1/1/2023	19,200,000	5.00%	2.87%	1.37%	1.500%			113.298%	21,753,216
8	1/1/2024	19,200,000	5.00%	3.08%	1.53%	1.550%			113.416%	21,775,872
9	1/1/2025	19,200,000	5.00%	3.22%	1.67%	1.550%			113.717%	21,833,664
10	1/1/2026	19,200,000	5.00%	3.33%	1.78%	1.550%			114.020%	21,891,840
11	1/1/2027	19,200,000	5.00%	3.49%	1.89%	1.600%	1/1/2026	100%	112.578%	21,614,976
12	1/1/2028	19,200,000	5.00%	3.57%	1.97%	1.600%	1/1/2026	100%	111.865%	21,478,080
13	1/1/2029	19,200,000	5.00%	3.66%	2.06%	1.600%	1/1/2026	100%	111.070%	21,325,440
14	1/1/2030	19,200,000	5.00%	3.74%	2.14%	1.600%	1/1/2026	100%	110.369%	21,190,848
15	1/1/2031	19,200,000	4.00%	4.10%	2.22%	1.880%			98.889%	18,986,688
16	1/1/2032	19,200,000	5.00%	3.93%	2.28%	1.650%	1/1/2026	100%	108.724%	20,875,008
17	1/1/2033	19,200,000	5.00%	3.98%	2.33%	1.650%	1/1/2026	100%	108.296%	20,792,832
18	1/1/2034	19,200,000	3.75%	3.91%	2.38%	1.526%			98.000%	18,816,000
19	1/1/2035	19,200,000	5.00%	4.08%	2.43%	1.650%	1/1/2026	100%	107.447%	20,629,824
20	1/1/2036	19,200,000	4.25%	4.33%	2.48%	1.845%			99.000%	19,008,000
21	1/1/2037	19,200,000	4.00%	4.05%	2.53%	1.520%			99.296%	19,064,832
22	1/1/2038	19,200,000	4.00%	4.10%	2.58%	1.520%			98.560%	18,923,520
23	1/1/2039	19,200,000	4.00%	4.13%	2.61%	1.520%			98.082%	18,831,744
25	1/1/2041	38,400,000	5.00%	4.27%	2.66%	1.610%	1/1/2026	100%	105.855%	40,648,320
		480,000,000								**514,971,072**

Source: Bloomberg; Thomson Reuters

The yields on state of Illinois bonds have increased over the last 10 years as the state's credit rating has deteriorated. Thus, all else equal, a state bond issued 10 years ago would receive a higher price from investors than a state bond issued today given the inverse yield/price relationship described above. However, the state's creditworthiness is not the only factor in determining its bond yield. Factors beyond the control of the state also determine bond yield such as the overall level and relationship of interest rates, the types of investors in the market at the time of sale, the volatility and overall supply in the bond markets, and changes in federal and state tax laws, to a name some of the other primary factors.

Thus, one needs to isolate the change in bond yield due to changes in creditworthiness from changes in other factors outside the control of the state. One way to estimate this isolation is through relative bond pricing analysis, which compares the changes in value of the state's bond yield to some municipal bond market benchmark index over varying bond issues sold at different times. A common benchmark index used in such analysis is the AAA rated MMD index. The AAA rated MMD index represents Thomson Reuters analysts' daily view of the value of AAA rated municipal bonds (i.e., the highest rated bonds) by maturity. Column F in Table 2 shows the " MMD AAA Yield" by maturity on the date the 2016 Bonds were priced. Column G in Table 2 shows the "IL to MMD AAA Yield Spread" for each maturity of the 2016 Bonds which represents the difference in yield of the 2016 Bonds to the MMD AAA rated yield for each maturity. This number is more generically know as the "yield spread" and it basically measures the relationship of the state's bond yield compared to AAA rated yields. The larger the yield spread, the higher the state's bond yields are compared to MMD AAA rated yields and, thus, the lower the price the state receives for its bonds. For the 2016 Bonds, this yield spread ranged from **0.67% to 1.88% with the the final maturity (2041) carrying a 1.61% yield spread**.

The counterfactual analysis in this Policy Brief compares the yield spread on the 2016 Bonds to 2006 Bonds. Table 3 *(following page)* provides sale details for each bond maturity for the state's 2006 Bonds. The 2006 Bonds are an appropriate comparison since these bonds were sold in the same month as the 2016 bonds (January) and before the state started receiving a steady stream of credit downgrades in 2008. Column E provides the bond yield for each maturity of the 2006 Bonds. Columns F and G show the "MMD AAA Yield" and "IL to MMD AAA Yield Spread" for each maturity of the 2006 Bonds at the time of the 2006 sale. For the 2006 Bonds, the yield spread ranged from 0.01% to 0.18%. **Thus, one can see a significant difference in the yield spread comparing the 2016 Bonds (0.67% to 1.88%) to the 2006 Bonds (0.01% to 0.18%). The difference in this yield spread reflects the extra cost of capital borrowing caused by the deterioration of the state's credit between 2006 and 2016.**

Table 3:
$325,000,000 State of Illinois, General Obligation Bonds, Series of January 2006
Actual Bond Sale Pricing

A	B	C	D	E	F	G	H	I	J	K
Year	Date	Amount	Coupon	Yield	MMD AAA Yield	IL to AAA MMD Yield Spread	Call Date	Call Price	Price (%)	Price ($)
1	1/1/2007	13,000,000	5.00%	3.25%	3.20%	0.050%			101.627%	13,211,510
2	1/1/2008	13,000,000	5.00%	3.27%	3.20%	0.070%			103.245%	13,421,850
3	1/1/2009	13,000,000	5.00%	3.33%	3.23%	0.100%			104.657%	13,605,410
4	1/1/2010	13,000,000	5.00%	3.43%	3.30%	0.130%			105.755%	13,748,150
5	1/1/2011	13,000,000	5.00%	3.51%	3.37%	0.140%			106.718%	13,873,340
6	1/1/2012	13,000,000	5.00%	3.60%	3.46%	0.140%			107.439%	13,967,070
7	1/1/2013	13,000,000	5.00%	3.69%	3.54%	0.150%			107.967%	14,035,710
8	1/1/2014	13,000,000	5.00%	3.81%	3.63%	0.180%			108.096%	14,052,480
9	1/1/2015	13,000,000	5.00%	3.88%	3.70%	0.180%			108.400%	14,092,000
10	1/1/2016	13,000,000	5.00%	3.95%	3.77%	0.180%			108.569%	14,113,970
11	1/1/2017	13,000,000	5.00%	4.01%	3.83%	0.180%	1/1/2016	100%	108.056%	14,047,280
12	1/1/2018	13,000,000	5.00%	4.06%	3.88%	0.180%	1/1/2016	100%	107.631%	13,992,030
13	1/1/2019	13,000,000	5.00%	4.11%	3.93%	0.180%	1/1/2016	100%	107.208%	13,937,040
14	1/1/2020	13,000,000	5.00%	4.16%	3.98%	0.180%	1/1/2016	100%	106.786%	13,882,180
15	1/1/2021	13,000,000	5.00%	4.19%	4.02%	0.170%	1/1/2016	100%	106.534%	13,849,420
16	1/1/2022	13,000,000	5.00%	4.22%	4.06%	0.160%	1/1/2016	100%	106.283%	13,816,790
17	1/1/2023	13,000,000	5.00%	4.25%	4.10%	0.150%	1/1/2016	100%	106.033%	13,784,290
18	1/1/2024	13,000,000	5.00%	4.28%	4.14%	0.140%	1/1/2016	100%	105.783%	13,751,790
19	1/1/2025	13,000,000	5.00%	4.30%	4.17%	0.130%	1/1/2016	100%	105.617%	13,730,210
20	1/1/2026	13,000,000	5.00%	4.33%	4.20%	0.130%	1/1/2016	100%	105.368%	13,697,840
21	1/1/2027	13,000,000	5.00%	4.36%	4.23%	0.130%	1/1/2016	100%	105.120%	13,665,600
22	1/1/2028	13,000,000	5.50%	4.33%	4.26%	0.070%			116.467%	15,140,710
23	1/1/2029	13,000,000	5.50%	4.34%	4.29%	0.050%			116.749%	15,177,370
24	1/1/2030	13,000,000	5.50%	4.35%	4.32%	0.030%			117.003%	15,210,390
25	1/1/2031	13,000,000	5.50%	4.36%	4.35%	0.010%			117.231%	15,240,030
		325,000,000								**351,044,460**

Source: State of Illinois, Series of January 2006 Bonds Official Statement; Bloomberg; Thomson Reuters

Table 4 *(following page)* provides the crux of the counterfactual analysis utilizing all the sale details of the 2016 bonds except the bond yield. For the bond yield, Table 4 relies on a simulated yield of the 2016 Bonds constructed by adding the actual yield spread on each maturity of the 2006 Bonds (i.e. Column G - "IL Yield to AAA MMD Yield on the 2006 Bonds") to the actual MMD AAA Yield for each maturity when the 2016 Bonds were priced (i.e, Column F -"Actual MMD AAA Yield at time of 2016 Bonds"). This is the "counterfactual yield" or what we would have expected the yield on the 2016 Bonds to be if the state's creditworthiness remained the same as it was in 2006. Using this simulated yield, the total dollar amount the state would have received from the sale of the 2016 Bonds under the counterfactual is **$567,875,712**[5].

[5] Construction of the simulated yield in the counterfactual pricing is complicated by the fact that some of the 2016 bond maturities were insured and standard 5 percent coupons were not used on all bonds. However, such complications do not materially impact the analyses or the order of magnitude of the policy conclusions given the significant yield spread differential between the 2006 and 2016 bonds. Sensitivity analyses were performed on this issue and are available from the author upon request.

Table 4:
$480,000,000 State of Illinois, General Obligation Bonds, Series of January 2016
Counterfactual Bond Sale Pricing

A	B	C	D	E	F	G	H	I	J	K
Year	Date	Amount	Coupon	Counter-factual Yield	Actual MMD AAA Yield at time of 2016 Bonds	IL to AAA MMD Yield Spread on 2006 Bonds	Call Date	Call Price	Price (%)	Price ($)
1	1/1/2017	19,200,000	5.00%	0.53%	0.48%	0.05%			104.143%	19,995,456
2	1/1/2018	19,200,000	5.00%	0.80%	0.73%	0.07%			108.029%	20,741,568
3	1/1/2019	19,200,000	5.00%	0.97%	0.87%	0.10%			111.615%	21,430,080
4	1/1/2020	19,200,000	5.00%	1.11%	0.98%	0.13%			114.919%	22,064,448
5	1/1/2021	19,200,000	5.00%	1.23%	1.09%	0.14%			117.981%	22,652,352
6	1/1/2022	19,200,000	5.00%	1.34%	1.20%	0.14%			120.797%	23,193,024
7	1/1/2023	19,200,000	5.00%	1.52%	1.37%	0.15%			122.808%	23,579,136
8	1/1/2024	19,200,000	5.00%	1.71%	1.53%	0.18%			124.301%	23,865,792
9	1/1/2025	19,200,000	5.00%	1.85%	1.67%	0.18%			125.819%	24,157,248
10	1/1/2026	19,200,000	5.00%	1.96%	1.78%	0.18%			127.310%	24,443,520
11	1/1/2027	19,200,000	5.00%	2.07%	1.89%	0.18%	1/1/2026	100%	126.177%	24,225,984
12	1/1/2028	19,200,000	5.00%	2.15%	1.97%	0.18%	1/1/2026	100%	125.361%	24,069,312
13	1/1/2029	19,200,000	5.00%	2.24%	2.06%	0.18%	1/1/2026	100%	124.450%	23,894,400
14	1/1/2030	19,200,000	5.00%	2.32%	2.14%	0.18%	1/1/2026	100%	123.647%	23,740,224
15	1/1/2031	19,200,000	4.00%	2.39%	2.22%	0.17%			114.156%	21,917,952
16	1/1/2032	19,200,000	5.00%	2.44%	2.28%	0.16%	1/1/2026	100%	122.454%	23,511,168
17	1/1/2033	19,200,000	5.00%	2.48%	2.33%	0.15%	1/1/2026	100%	122.059%	23,435,328
18	1/1/2034	19,200,000	3.75%	2.52%	2.38%	0.14%			110.745%	21,263,040
19	1/1/2035	19,200,000	5.00%	2.56%	2.43%	0.13%	1/1/2026	100%	121.274%	23,284,608
20	1/1/2036	19,200,000	4.25%	2.61%	2.48%	0.13%			114.263%	21,938,496
21	1/1/2037	19,200,000	4.00%	2.66%	2.53%	0.13%			111.625%	21,432,000
22	1/1/2038	19,200,000	4.00%	2.65%	2.58%	0.07%			111.718%	21,449,856
23	1/1/2039	19,200,000	4.00%	2.66%	2.61%	0.05%			111.625%	21,432,000
25	1/1/2041	38,400,000	5.00%	2.67%	2.66%	0.01%	1/1/2026	100%	120.205%	46,158,720
		480,000,000								**567,875,712**

Source: Bloomberg; Thomson Reuters

SUMMARY OF RESULTS AND DISCUSSION

Figure 1 charts the actual and counterfactual bond yields for each maturity of the 2016 bonds. The distance between these two lines visually illustrates the yield benefit that the state would have received if it could have sold its 2016 Bonds at the relative prices it received on its 2006 Bonds. Table 5 summarizes the difference in dollars between what the state actually received from its 2016 bond sale and what it would received under the counterfactual analysis. The actual dollar amount the state received was $514,971,072. The dollar amount the state would have received under the counterfactual was $567,875,712. **This represents a $52,904,640 increase in price for the 2016 Bonds assuming the state was able to sell its bonds at the same relative price as the 2006 Bonds.**

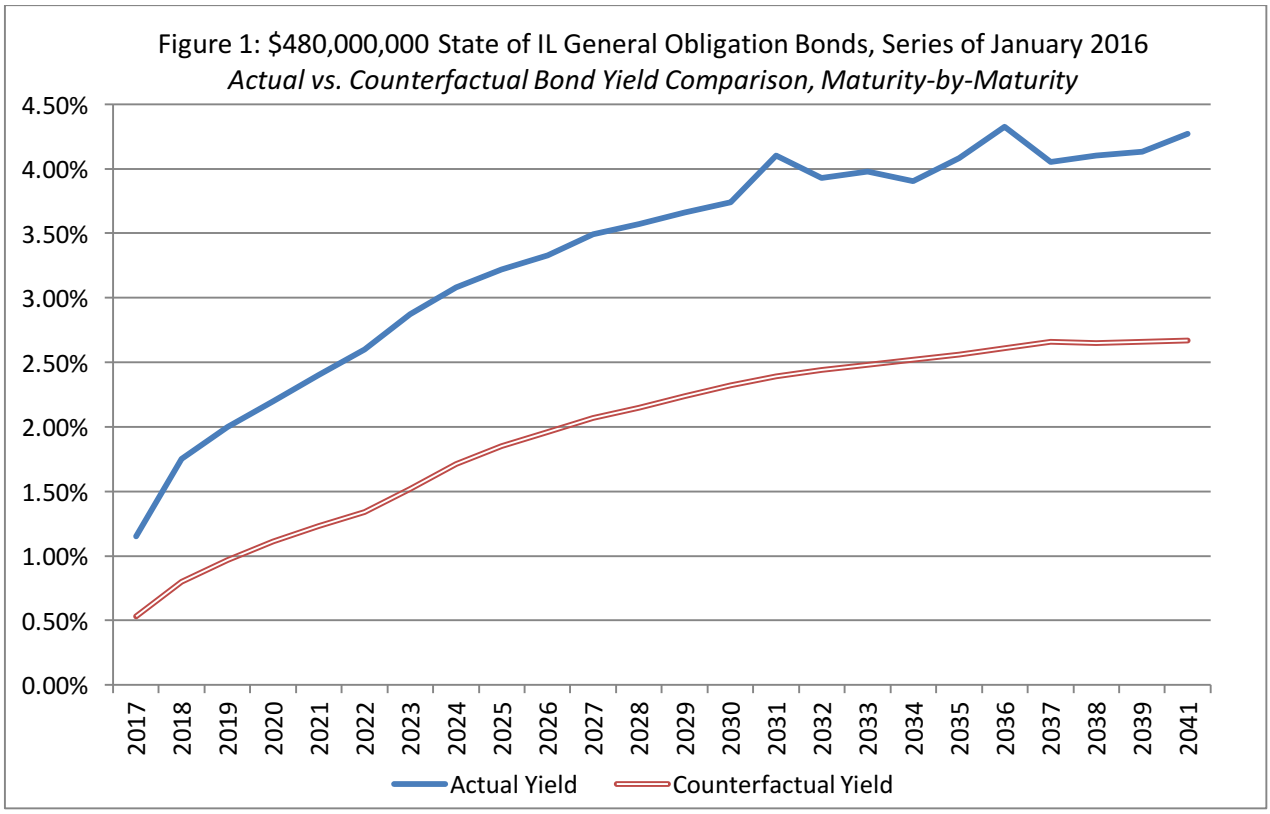

Table 5: $480,000,000 State of Illinois General Obligation Bonds, Series of January 2016 *Actual Bond Prices vs. Counterfactual Bond Prices*							
		Actual 2016 Bonds Pricing			Counterfactual 2016 Bonds Pricing		
Maturity Date	*Principal Amount*	*Yield*	*Price %*	*Price $*	*Yield*	*% Price*	*$ Price*
1/1/2017	19,200,000	1.15%	103.552%	19,881,984	0.53%	104.143%	19,995,456
1/1/2018	19,200,000	1.75%	106.141%	20,379,072	0.80%	108.029%	20,741,568
1/1/2019	19,200,000	2.00%	108.496%	20,831,232	0.97%	111.615%	21,430,080
1/1/2020	19,200,000	2.20%	110.486%	21,213,312	1.11%	114.919%	22,064,448
1/1/2021	19,200,000	2.40%	112.020%	21,507,840	1.23%	117.981%	22,652,352
1/1/2022	19,200,000	2.60%	113.109%	21,716,928	1.34%	120.797%	23,193,024
1/1/2023	19,200,000	2.87%	113.298%	21,753,216	1.52%	122.808%	23,579,136
1/1/2024	19,200,000	3.08%	113.416%	21,775,872	1.71%	124.301%	23,865,792
1/1/2025	19,200,000	3.22%	113.717%	21,833,664	1.85%	125.819%	24,157,248
1/1/2026	19,200,000	3.33%	114.020%	21,891,840	1.96%	127.310%	24,443,520
1/1/2027	19,200,000	3.49%	112.578%	21,614,976	2.07%	126.177%	24,225,984
1/1/2028	19,200,000	3.57%	111.865%	21,478,080	2.15%	125.361%	24,069,312
1/1/2029	19,200,000	3.66%	111.070%	21,325,440	2.24%	124.450%	23,894,400
1/1/2030	19,200,000	3.74%	110.369%	21,190,848	2.32%	123.647%	23,740,224
1/1/2031	19,200,000	4.10%	98.889%	18,986,688	2.39%	114.156%	21,917,952
1/1/2032	19,200,000	3.93%	108.724%	20,875,008	2.44%	122.454%	23,511,168
1/1/2033	19,200,000	3.98%	108.296%	20,792,832	2.48%	122.059%	23,435,328
1/1/2034	19,200,000	3.91%	98.000%	18,816,000	2.52%	110.745%	21,263,040
1/1/2035	19,200,000	4.08%	107.447%	20,629,824	2.56%	121.274%	23,284,608
1/1/2036	19,200,000	4.33%	99.000%	19,008,000	2.61%	114.263%	21,938,496
1/1/2037	19,200,000	4.05%	99.296%	19,064,832	2.66%	111.625%	21,432,000
1/1/2038	19,200,000	4.10%	98.560%	18,923,520	2.65%	111.718%	21,449,856
1/1/2039	19,200,000	4.13%	98.082%	18,831,744	2.66%	111.625%	21,432,000
1/1/2041	38,400,000	4.27%	105.855%	40,648,320	2.67%	120.205%	46,158,720
Total	480,000,000			514,971,072			567,875,712
Difference				52,904,640			

This nearly $53 million "financial condition penalty" is an estimate of the cost to the state on this bond issue by letting its financial condition deteriorate over the last 10 years. In addition, one must remember that this is the penalty for our poor fiscal condition for this bond issue alone. Assuming that in the future the state will sell debt at typical levels of about $1 billion each year, this financial condition penalty grows to $106 million per year. Furthermore, based on recent analyses, the state will likely need to issue much more annual debt than this to address its growing infrastructure demands. The annual bond amounts necessary to address the state's infrastructure needs range from $4 to $8 billion.[6] Using the low range of this amount ($4 billion), the financial condition penalty estimate grows to $424 million per year (i.e., $106 million per $1 billion sold or $424 million for $4 billion sold). Even in the context of the overall state budget, this is a significant amount of annual money, especially given the dire fiscal straits the state finds itself in today. For example, this $424 million would provide a substantial amount of the extra annual funding the Chicago Public Schools is requesting from the state to address its own budget deficit.

Such financial condition penalty naturally makes one long for the good old days of 2006 when the state received much higher prices for its debt. But such longing will not bring better prices for state bonds. Only substantial fiscal action that repairs the creditworthiness of the state in the eyes of its bond investors will accomplish that. Such fiscal actions will likely be painful, but this Policy Brief's analyses offer an estimate of the bond market benefits that will inure to the state if it is successful. On the other hand, the report also details the significant borrowing cost pain that will ensue if such actions are not taken.

[6] Luby, Martin J. (September, 2015). State of Illinois debt affordability report. University of Illinois Institute of Government and Public Affairs. Available at: http://igpa.uillinois.edu/system/files/State-of-Illinois-Debt-Affordability-Report-IGPA.pdf

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The Fiscal Futures Project began in 2008 out of concern that the state of Illinois lacked sufficient capacity to project its fiscal demands and revenue streams into the future. A longer term perspective is needed due to: (1) The structural deficit: state expenditures have been growing faster than revenue (2) The serious consequences of making policy choices while ignoring the impact on the budget in future years (3) The relentless pressure on future budgets from an aging population and continuing increases in the cost of health care.

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