

Term Limits and Municipal Borrowing Costs

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Term Limits

- Gubernatorial Term Limit: is a legal restriction that limits the number of terms state governor can serve in office.
 - 10 states had no term limit.
 - 29 states had some term limits.
 - 11 states changed their term limit status.
- Legislative Term Limit: constrains the number of terms state legislators can serve in office.
 - As of 2010, there were 15 states with legislative term limit.

Research Questions

- Does “Governor last term” when gubernatorial term limits are binding, associated with higher municipal bond yields?
- Are gubernatorial term limits associated with higher municipal bond yields?
- Are legislative term limits associated with higher municipal bond yields?

Gubernatorial Term Limits Related Literature

- Besley and Case (1995) model with imperfect information findings:
 - Gubernatorial term limit is associated with higher government spending in the last term and lower spending in the first term of the Governor
 - Variation in spending across the two terms leads to greater fiscal volatility
- Gubernatorial term limit leads to greater volatility in state fiscal activity (Crain and Tollison, 1993).

Data

Bond data: SDC Platinum, Global Public Finance Database, 1990 -2010

Initial sample: 302,754 results in 255,617

Final sample: 99,325

- We convert S&P letter ratings to numeric ratings: 1, 2, 3,... , denoting AAA, AA+,, and so on, respectively.
- Closest benchmark Treasury rate – FRED
- The 1-year Treasury rate - FRED
- Term slope – FRED
- State macro-economic and demographic variables – U.S. Census, SGF, BLS, NBER

Summary Statistics

Table 1: Bond characteristics

Variable	Mean	Median	p25	p75	Obs.
Proceeds	35.559	9.900	4.390	29.470	99325
Maturity	18.286	19.364	13.058	22.485	99325
Bond Yield	4.842	4.825	4.240	5.450	99325
Bond Rating	2.273	1.000	1.000	3.000	99325
Credit Enhancement	0.597	1	0	1	99325
Go Bond	0.625	1	0	1	99325
Negotiated Bond	0.571	1	0	1	99325

Empirical Framework

$$Yield_{ijt} = \delta + \beta P_{jt} + \psi_i T_{it} + \phi_j Z_{jt} + \alpha_j + \lambda_t + \varepsilon_{ijt}$$

where:

P represents a set of key predictors

T represents a vector of bond characteristics

Z represents a vector of state macro-economic and demographic variables

α_j denotes state fixed effects

λ_t denotes year fixed effects

Control Variables

Bond characteristics

Proceeds

Maturity

Bond rating

Credit enhancement

Callable bond

Go bond

Negotiated bond

Minority underwriter

Underwriter reputation

Macro-economic variables

Matching treasury

T-note

Term slope

State level characteristics

Debt/GDP

Revenue/Expenditure

Population

Unemployment rate

Marginal tax rate

Education rate

Median age

Male/Female ratio

Non-Hispanic white ratio

Identification Issue

- Do economic conditions that influence the decision to adopt term limits also impact municipal bond yields?

Solution - We follow Besley and case (1995) strategy, we consider:

- sample of bonds from states that had gubernatorial term limits over the sample period.
- sample of bonds from states that had no change in gubernatorial term limits over the sample period.
- sample of bonds from states that had a change in gubernatorial term limits.
- all bonds issued over the sample period.

Results

Table 5: Governor Last Term and Municipal Bond Yields

	Had GTL over sample period	Had no change in GTL over sample period	Had a change in GTL over sample period	Full sample
Governor Last Term	0.0341** (2.18)	0.0446** (2.42)	0.0311** (2.15)	0.0416*** (2.62)
Controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
State Fixed Effects	YES	YES	YES	YES
Adjusted R-Squared	0.801	0.822	0.847	0.825
Observations	47564	83605	15720	99325

Last Term and Bond Characteristics

- The last term of Governors' is associated with a greater likelihood of long term capital projects (Crain and Oakley, 1995).
- Are bonds issued in the Last Term different?
- Do these differences account for higher yields?
 - We find that:
 - Negotiated deals are higher in the Last Term
 - Negotiated deals have higher yield in the Last Term
 - Revenue bonds also have higher yield in the Last Term

Gubernatorial Term Limits and Municipal Bond Yields

- Governor Last Term effect is captured when the gubernatorial term limit is binding.
- Next, we look at the difference in states with gubernatorial term limits and those without the term limits.

Table 8: Gubernatorial Term Limits and Municipal Bond Yields

	Model 1	Model 2	Model 3
Governor Last Term		0.0394** (2.54)	0.0314** (2.13)
Gubernatorial Term Limit	0.0816*** (3.57)	0.0739*** (3.38)	0.0385** (2.01)
Controls	YES	YES	YES
Constant	YES	YES	YES
Year fixed effects	YES	YES	YES
State fixed effects	YES	YES	YES
Adjusted R-Squared	0.825	0.825	0.847
Observations	99325	99325	15720

Post-Governorship Career and Yields

- In Besley and Case (1995) model, higher “Last Term” spending arises due to low reputation building.
- If Governor has political aspirations post-governorship, then the “Last Term” effect should be lower.

Table 8: Post-Governorship Career and Municipal Bond Yields

	Model 4	Model 5	Model 6
Governor Last Term	0.0510** (2.54)	0.0735*** (3.06)	0.0393** (2.53)
Post Governor	-0.0434* (-1.70)		
Post Governor Plus		-0.0780*** (-3.14)	
Weak Limit			0.0895*** (3.41)
Moderate Limit			0.0525** (2.21)
Strong limit			0.0793** (2.12)
Controls	YES	YES	YES
Constant	YES	YES	YES
Year fixed effects	YES	YES	YES
State fixed effects	YES	YES	YES
Adjusted R-Squared	0.825	0.826	0.825
Observations	99325	99325	99325

Legislative Term Limits Related Literature

- Legislative term limit is associated with significant increase in turnover for legislators (Moncreif, Neimi and Powell, 2004).
- Higher turnover among legislators leads to short term fiscal outlooks, and loss of experience and policy expertise (Cummins, 2012).
- Legislative term limit is associated with higher state spending (Erler, 2007)

Table 10: Legislative Term Limits and Municipal Bond Yields

	Model 1	Model 2	Model 3	Model 4	Model 5
Legislative Term Limit	0.0721*** (3.43)		0.0657*** (3.06)	0.0624*** (3.03)	
Impact Years		0.0689*** (3.71)			
Governor Term Limit				0.0613*** (2.99)	
Governor Last Term				0.0401*** (2.58)	0.0402*** (2.59)
Both Term Limits					0.0655*** (2.95)
Neither Term Limits					-0.0580*** (-2.86)
Controls	YES	YES	YES	YES	YES
Constant	YES	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES	YES
State Fixed Effects	YES	YES	YES	YES	YES
Adjusted R-Squared	0.825	0.825	0.829	0.825	0.825
Observations	99325	99325	25045	99325	99325

Political Party Affiliation


- Besley and Case (1995) documents that:
 - states with term limits are significantly more likely to be governed by democrats.
 - higher taxes and spending in the last term of the Governor is seen only in states with democratic Governors.

Our Results:

- We find no impact of party affiliation on municipal bond yields.

Conclusion

- Governor last term when gubernatorial term limit is binding is associated with higher municipal bond yields.
- Gubernatorial term limits are associated with higher municipal bond yields.
- When gubernatorial term limit is binding, the “Last Term” of Governors that have political aspirations beyond governorship is associated with lower yields relative to that of those that do not display further political ambitions.
- Legislative term limits are associated with higher municipal bond yields.



THANK YOU!!