

Political Risks in Municipal Bonds

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BONDS MARKET

Introduction and Background



Municipalities issue municipal bonds (5% Coupon with \$100 par value)

Depends on various Risks: Economic, Financial etc

We aim to study political risk in offering documents

Kornai (1980) - Soft Budget Constraint Theory

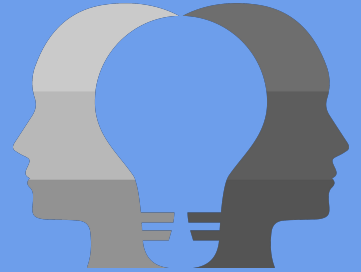


Research Statement

Political Risk Disclosure in Municipal Bond Documents

Political Volatility on Bond Yields (Municipal, State, Federal Levels)

Analysis of $N \sim 1000$ Bond Offering Documents to Quantify



Research Question & Hypothesis

Primary Research Question

How is Political Risk Information Represented in Municipal Bond Documents

H_0

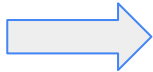
Political Risk Information is Not Systematically Shared in Municipal Bond Documents

H_1

Political Risk Information is Systematically Shared in Municipal Bond Documents



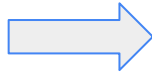
Design: Where We're Getting the Data



Bonds



Notes



Bridges



Schools

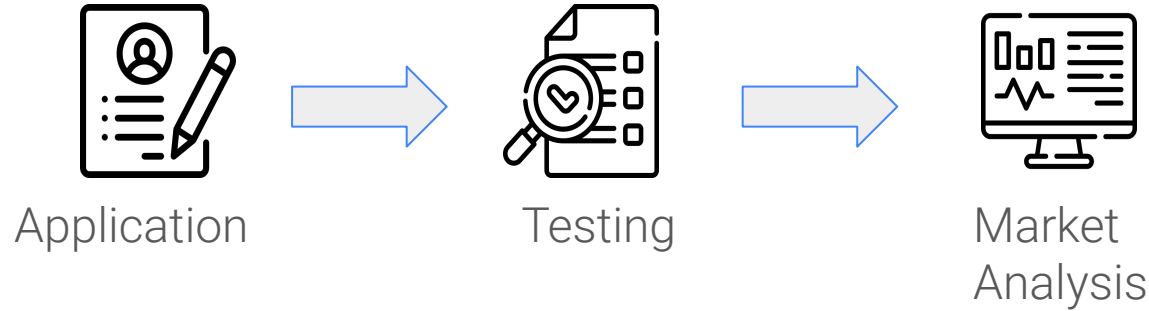


Roads



Municipal Securities
Rulemaking Board

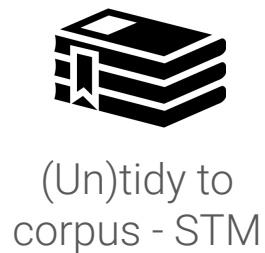
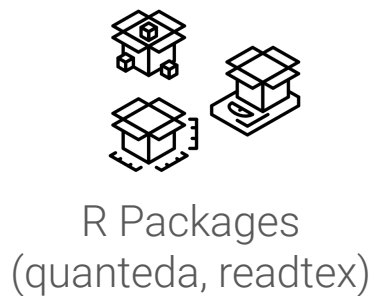
Design: What is EMMALabs?



EMMALabs

A service by the MSRB that allows users to test new applications that empower users to have access to accurate market information.

Design: Methodology



"Topic" Modeling

Dictionary based
(supervised)

Structural-topic modeling
(unsupervised)

Thank You!

Questions, Comments, Concerns?

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References

Farrell, Michael, Dermot Murphy, Marcus Painter, and Guangli Zhang. "The Complexity Yield Puzzle: A Textual Analysis of Municipal Bond Disclosures."

Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21(3): 267–97. doi:10.1093/pan/mps028.

Kornai, János. 1980. *A Economics of Shortage*. North-Holland Publishing Company.

Roberts, Margaret E., Brandon M. Stewart, Dustin Tingley, Christopher Lucas, Jetson Leder-Luis, Shana Kushner Gadarian, Bethany Albertson, and David G. Rand. 2014. "Structural Topic Models for Open-Ended Survey Responses." *American Journal of Political Science* 58(4): 1064–82. doi:10.1111/ajps.12103.

Kern, Florian G., Kristian Skrede Gleditsch, and Rebecca Cordell. 2024. "Judiciary Institutions and Violent Crime in American Indian Nations." *Governance* 37(1): 137–59. doi:10.1111/gove.12756.