Muni Bond Trading Analysis – Week 11

Rodian Floyd

Repo: github.com/rodian-floyd24/GATOR

Goal: actionable municipal insights + deployed Streamlit dashboard

Objective

Extract liquidity, rating, and spread signals from GATOR_DB.MUNI.

Deliver Streamlit dashboard with filtering + CSV export.

Support inventory decisions, credit watch, client pitching.

Data & Environment

Tables: BONDS, TRADES, ISSUERS, BOND_PURPOSES, CREDIT_RATINGS, ECONOMIC_INDICATORS.

Role/Warehouse: TRAINING_ROLE / GATOR_WH.

Schema: GATOR_DB.MUNI.

App Overview

5 tabs: Liquidity, State–Purpose, Ratings, Trendline, Spreads.

Filters: date range, state multiselect, row limits.

Full SQL pushdown via Snowpark.

Query 1: Liquidity Leaders

Top traded bonds with issuer/state/purpose context.

Liquidity clusters: Healthcare, Public Safety, Transportation in IL/TX/NY/FL.

Query 2: State–Purpose Hotspots

State × Purpose analysis.

Education dominates NY/CA; Healthcare/Utilities strong in FL/IL.

Query 3: Rating Migration Monitor

Earliest vs latest ratings using window functions.

1■notch drifts common within A/AA.

Query 4: Monthly Trendline

Monthly trades, quantity, price.

Mid■year volume peaks; pricing stable 101–105.

Query 5: Coupon Spread vs 10Y Treasury

State■month coupon minus benchmark.

IL/TX/FL ~300–350 bps spreads.

How to Run

Open Streamlit app in Snowsight.

Apply filters; download CSV per tab.

Edit SQL if schema changes.

Next Steps

Add issuer/purpose filters.

Rating/spread alerts.

Optional PR workflow for app changes.

Appendix / Links

analysis_week11.pdf

queries_week11.sql

streamlit_app.py