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Long-range correlation and market segmentation in bond market

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HIGHLIGHTS

- We see clear proof of long-range correlation in bond market, which has important implications for monetary policy purposes.
- Hurst exponents tend to be larger as bond maturities increase with a peak in 3 or 6 months.
- The bond market exhibits segmentation pattern in the long run.
- Long-range auto-correlations in bond market are decreasing in the recent years while long-range cross-correlations are strengthening.
- We combine long-range correlation method with network analysis and reveal the long-range cross-correlation structure intuitively.