

Discussing “The Impact of the Shadow Banking Sector on Public Finance” for the Brookings Muni Finance Conference

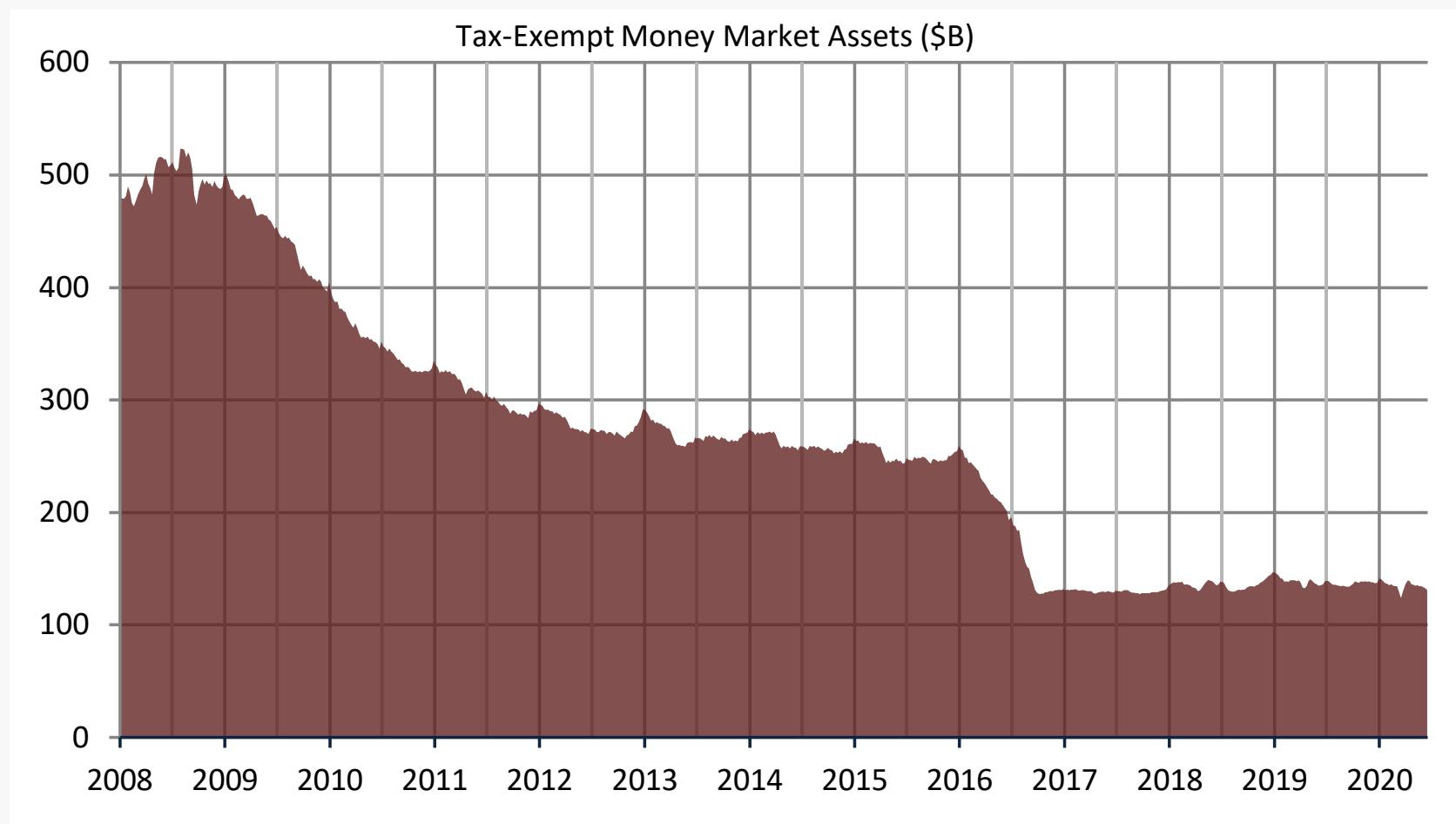
June 15, 2020

Matt Fabian, Partner, MMA

Considerations for users of the study

- ICI flow data are clear that 2a7 assets declined post SEC reform
- But effectively analyzing municipal issuers' short-term capital market costs is extremely difficult as most of those costs are non-public
- And most governments used floating rate debt to access synthetic fixed rates via derivatives; floating rates were not typically a focus
- In a post-derivatives market, and as bank capital regulations changed, state and local governments' reliance on money market funds dissipated
- Governments now use bank loans, the costs of which are also non-public
- Municipal data (always) has gaps and limitations that carry through to analyses that lean heavily on data alone

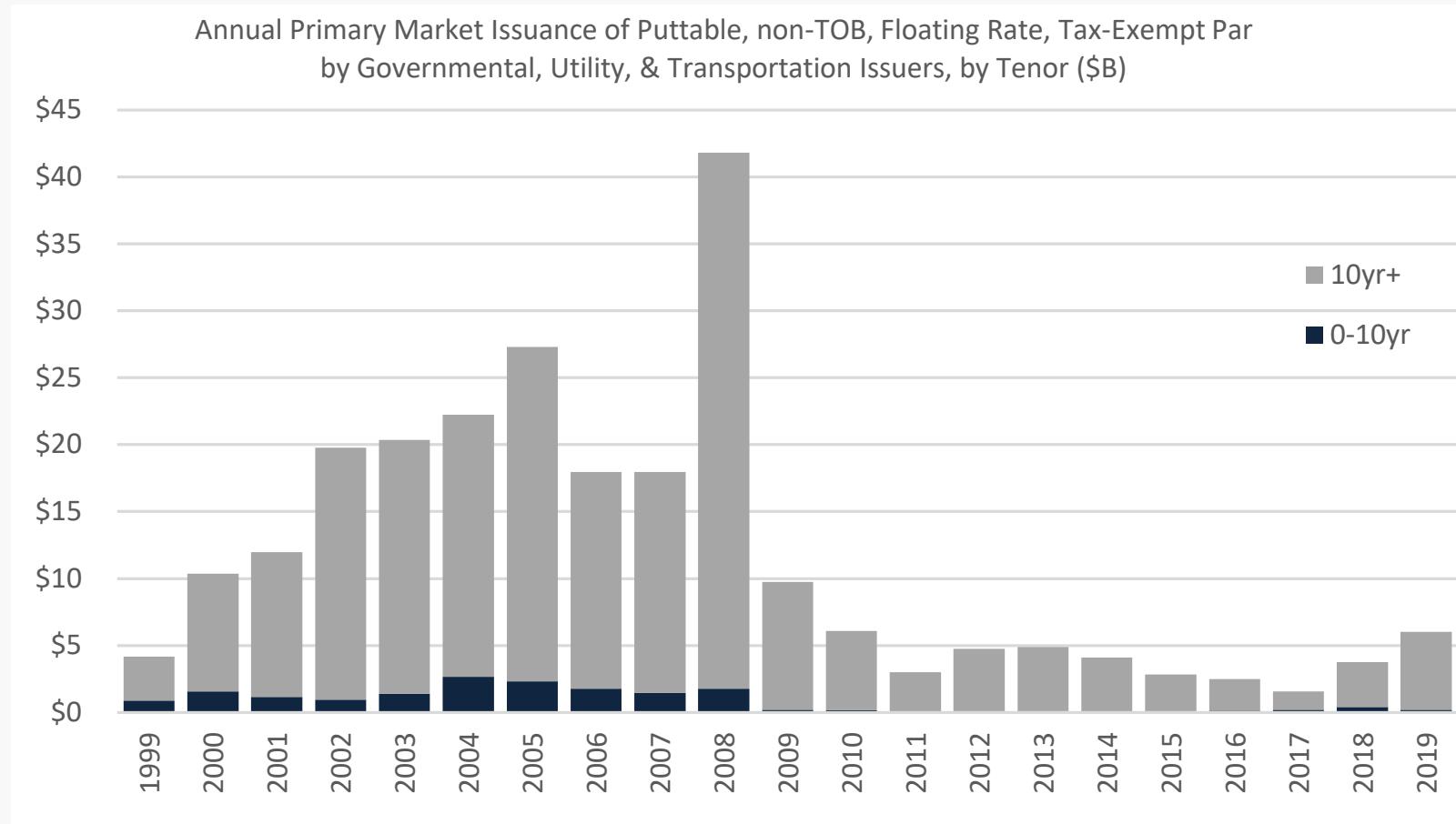
Clear that SEC reform catalyzed money fund outflows



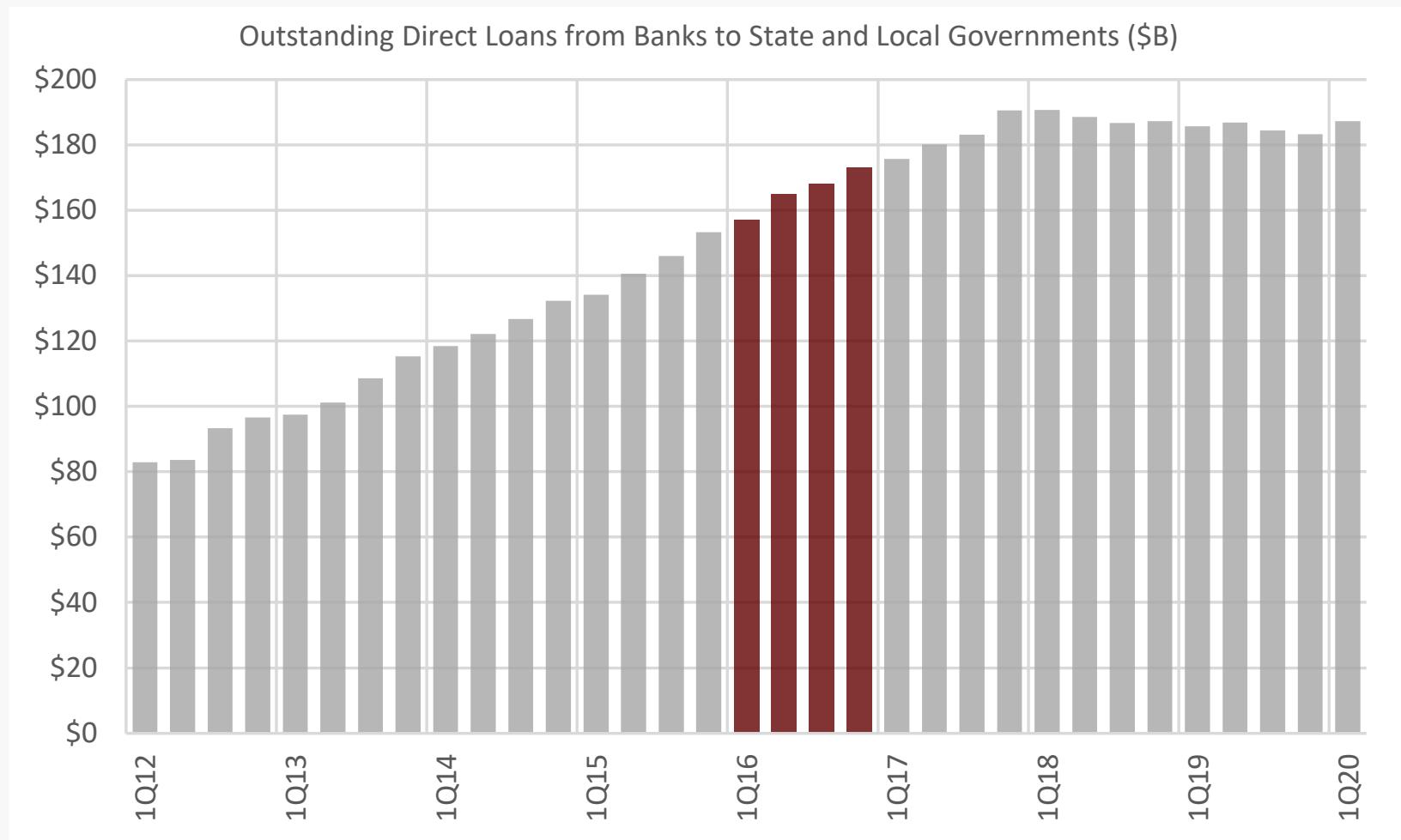
But borrowing costs for VRDO issuers are not just the reset

- Also need the LF/LOC cost (~30-40bps per annum in 2016, but increases were happening with regulatory changes and capital requirements, a few decreases came later with competition)
- Plus remarking fees (~5bps), Plus rating fees (~5bps), Plus bond insurance fees sometimes; none of these are public or systematically available
- And governmental issuers were probably looking more to fixed payor swap costs than cash floating costs and/or basis mismatch with floating side of swap
- Any governmental issuer that was still running substantial exposure to VRDOs in 2016 was there for a reason, most likely a bad one (e.g., unaffordable swap termination cost, broken credit profile, etc.)

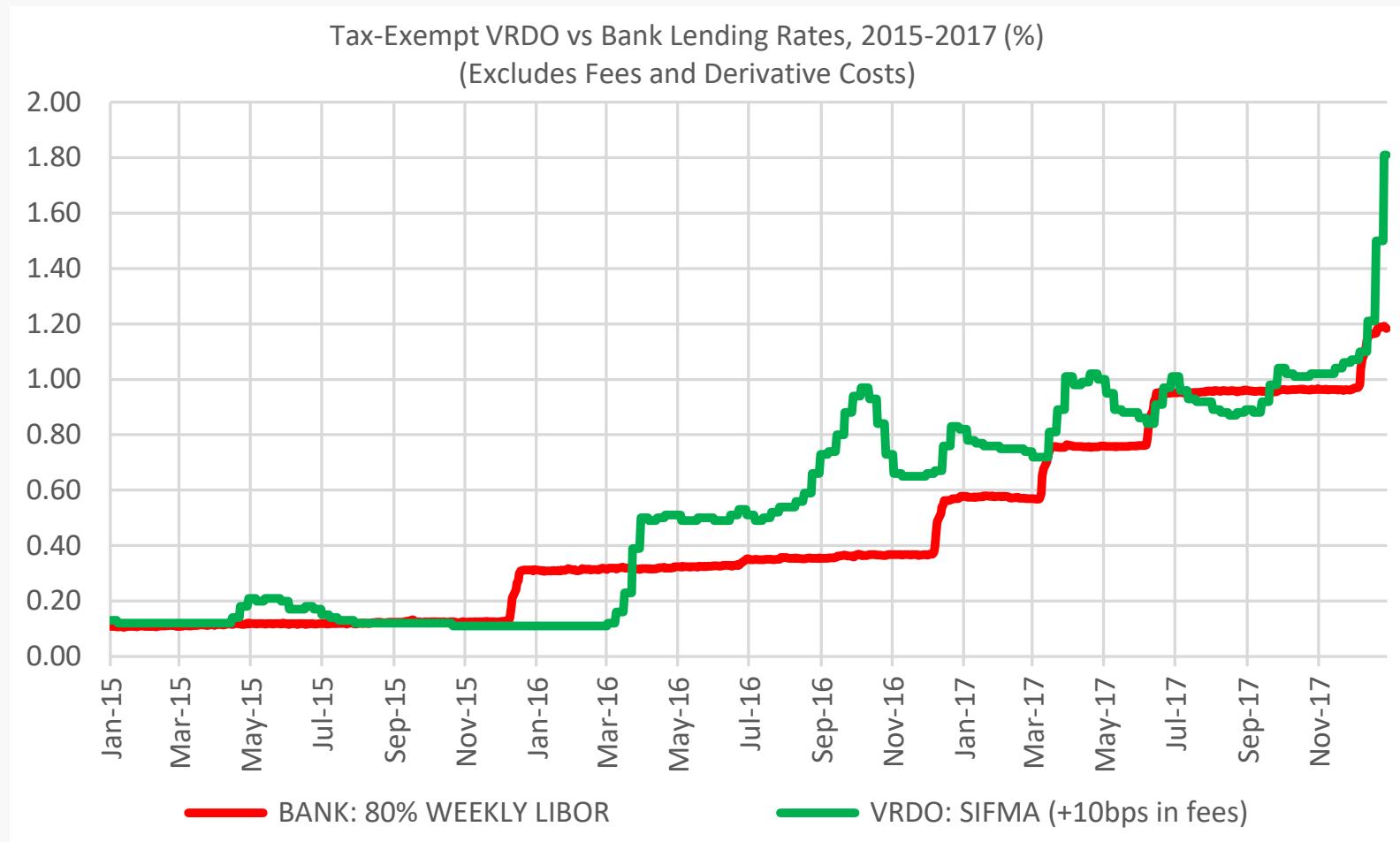
Governments' use of VRDOs reflected pre-crisis financial engineering & risk taking; post-crisis utilization has been tiny



Banks helped make the change; capital requirements finalized in 2016 meant LC/LOCs were converted into direct bank loans



Taxable outperformance aided banks' argument: direct loans were both safer and cheaper for most governments



Nominal rate increases in this period reflected reduced money fund demand, but also other, more important factors

- T-E floating yields in 2015 and 2016 had run at abnormal lows, created by extreme and structural supply issues within the 2a7 market as
 - Governmental issuers abandoned derivatives (and thus VRDOs),
 - Banks converted entire LC/LOC programs into direct loans, and
 - Volcker Rule more permanently contracted remaining TOB universe
- The rate rise in late 2016 and 2017 also reflected macro & supply factors
 - The Fed started raising rates and Brexit happened,
 - New issue muni supply jumped (May-Nov) ahead of the election,
 - Strained budgets propelled note sales 37% higher in 2017, and
 - Any local governments still in VRDOs at that point skewed weaker than the average issuer

Incremental regulatory intervention can be constructive

- Money market funds were not the root cause of the financial crisis affecting municipals, but **money funds were the primary platform used by the products that were crisis vectors** (e.g., TOBs, issuer derivatives, bond insurance and bank ratings)
- Making money funds a little less useful to leverage-based investment vehicles has removed a major element of systemic risk within munis
- Primary users of VRDOs have been hospitals, housing authorities, and higher education providers: these tend to have more sophisticated management teams; TOB activity remains but is trivial vs pre-crisis
- Governments by and large use bank loans for floating rate exposure, and banks are heavily regulated by the Federal government, helping to address related knock-on risks that could accrue to borrowers