STATEMENT OF THE HONORABLE RON G. CRANE IDAHO STATE TREASURER HEARING ON IMPROVING COMMUNITIES AND BUSINESSES ACCESS TO CAPITAL AND ECONOMIC DEVELOPMENT COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS SUBCOMMITTEE ON SECURITIES, INSURANCE AND INVESTMENT MAY 19, 2016

Chairman Crapo, Ranking Member Warner and members of the Subcommittee, I appreciate the opportunity to provide testimony on legislative proposals to improve access to capital and economic development for communities and businesses.

As the statewide-elected Treasurer of Idaho since 1998, I am responsible for the state's debt management, including the issuance of both short term debt, such as Tax Anticipation Notes, and bonds. My office oversees a number of debt management programs that support public infrastructure investment, including the Idaho Bond Bank Authority, the Idaho School Bond Guaranty Program, and Tax Anticipation Notes. Also established in statute are the Idaho Health Facilities Authority, which provides financing to nonprofit health care providers; the Idaho Housing and Finance Association, which issues revenue bonds to finance affordable housing; and the Idaho State Building Authority, which functions as the capital financing arm of the State.

Also, on the cash management side, I am responsible for investing all general account and pooled agency cash, as well as managing Idaho's \$3.2 billion local government investment pool ("LGIP").

I direct receipt of all state monies, and the accounting and disbursement of public funds.

In particular, I want to focus my comments today on S. 1802, the Consumer Financial Choice and Capital Markets Protection Act.

This bipartisan legislation is important to protecting the financing and investment options of governments, businesses and communities in Idaho and throughout the country. I want to express my gratitude to Senators Toomey and Menendez, as well as to you, Mr. Chairman, for your sponsorship of that legislation.

Background

The Securities and Exchange Commission (SEC) has taken important actions since the financial crisis of 2008 to strengthen the resiliency of money market funds, reduce systemic risk, and protect investors. In 2010, the SEC imposed new liquidity and transparency requirements on money market mutual funds that have proven successful through several market stresses, including the European debt crisis of 2011, the U.S. debt ceiling impasse and concerns about the downgrading of U.S. debt that same year, and the debt-ceiling standoff in 2013.

Then in July 2014, the SEC adopted additional obligations on money market funds, including enhanced disclosures, stress testing, and increased portfolio diversification requirements, among other things. Like the 2010 reforms, these are welcome changes that have strengthened the ability of money market funds to safely meet the cash management and short-term investment needs of businesses, state and local governments, and other institutions.

However, as part of the July 2014 amendments to Rule 2a-7, the SEC also adopted a requirement, effective on October 14 of this year, which in effect eliminates the utility of any money market fund to investors who are not "natural persons" (in the terminology of the Rule) unless the fund invests exclusively in U.S. government securities.

Under this new requirement, any tax-exempt or prime money market fund accepting any investor other than a "natural person" will no longer be able to offer and redeem shares based on amortized cost valuation of its portfolio to produce a stable, \$1 net asset value (NAV). Instead, such funds will have to apply a fluctuating or "floating" NAV using market-based estimated values. Simply, again, the floating NAV goes beyond regulation of the money market fund to just kill it as a cash management tool. I do not believe cash investors, such as myself, want, or will use, a floating NAV fund for cash investments.

Thus, by October 14, all investors other than "natural persons" are forced to leave any stable value, dollar per share, prime or tax-exempt money market fund. Since these investors are managing cash, they will be looking to move to a different, stable-value cash management vehicle. As a practical matter, this means most will either put their cash in a money market fund investing exclusively in U.S. government securities or deposit their cash in the bank.

In either case, that money will no longer be available in the portfolio of a prime or tax-exempt fund to loan to businesses or invest in tax-exempt notes and bonds of Idaho, other state and local governments, and other nongovernment issuers such as hospitals and universities.

Treasury Strategies Survey

Attached as an Appendix to this Statement is a survey and analysis of the extent to which the assets of tax-exempt money market funds are from "non-natural persons" performed by Treasury Strategies, an economic consulting firm, for The Coalition for Investor Choice.

Treasury Strategies' work to document the impact of the SEC's new requirement forcing out "non-natural" person investors provides accurate data to underlie your support of S. 1802. To my knowledge, no one else has undertaken to discern this impact, including the SEC.¹

How S. 1802 Supports Economic Development

Treasury Strategies has concluded that this one SEC requirement, by itself, will reduce the assets in tax-exempt money market funds by at least 40 percent.

Further, as Treasury Strategies' Report shows, in anticipation of this loss of assets, many funds lose viability and are simply liquidating, in total, now. Those who are not liquidating, but remain uncertain as to the extent of the loss of assets they will experience by October, are actively shortening their portfolio maturities.

¹ In its Release adopting the 2014 amendments to Rule 2a-7, the SEC asserted that "institutional" investors likely held less than 15 percent of tax-exempt money market fund assets. *Money Market Fund Reform; Amendments to Form PF*, <u>www.sec.gov/rules/final/2014/33-9616.pdf</u> at p. 244; 79 Fed. Reg. 47736 (Aug. 14, 2014). However, the SEC was relying on data differentiating "institutional" and "retail" funds by criteria such as minimum account size; not the distinction in its rule of "natural" vs. "non-natural" persons. In addition, the SEC asserted that such data overstated "institutional" assets because omnibus accounts likely consisted of retail investors. Thus, the SEC assumed, without comparable data or performing its own study, that its action would not significantly impact the assets of tax-exempt money market funds. The present impact is an unintended consequence.

At the end of 2015, tax-exempt money market funds held about \$263 billion in assets.² That is about 6.5% of the total tax-exempt debt market. But it's about two-thirds of the short-term municipal debt market, and that has varied between two-thirds and 80 percent over the past five years.

This is all money that is invested in funding state and local government. The Treasury Strategies' Report shows you how those investments span the country, both in absolute and per capita terms. While states such as New York, Massachusetts, Illinois, Pennsylvania, New Jersey, Indiana, and Ohio³ stand out as among the largest ten issuers in absolute dollar terms, the impact on Idaho is very significant on a per capita basis, along with every other state, including Virginia, Rhode Island, Montana, Tennessee, Louisiana, South Carolina, Nebraska and Kansas.

We in Idaho, including both state and local government directly, as well as other Idaho issuers, benefit from over \$600 million of money market fund investments. If tax-exempt money market funds lose, at a minimum, half of their assets because "non natural persons" are no longer permitted to invest in them, that implies that Idaho could lose at least \$300 million of its present financing from this source at the present rates.

What, then, will my choices be for an alternative funding source? There will be two options. First, I will likely have to pay higher interest rates in order to place my debt. This is the most basic principle of supply and demand in the auction process of the market. When the assets available for investment go down, but the demand does not, the cost will go up.

This impact is occurring right now. For example, each year I take approximately \$500 million in Tax Anticipation Notes to market, and these notes have always been purchased by an array of different tax-exempt money market funds. There are substantially fewer bidders this year, and I've already been told my cost is going up.

² https://www.sec.gov/divisions/investment/mmf-statistics/mmf-statistics-2016-3.pdf

³ Many supporters of S. 1802, in addition to myself, have acknowledged their support or made their letters available to the Coalition for Investor Choice. See www.protectinvestorchoice.com. For example: Letter of Massachusetts Treasurer Deborah B. Goldberg to Senator Warren (February 26, 2016); Letter of Carole Brown, Chief Financial Officer, City of Chicago to Senator Kirk (April 13, 2016); Letter of David J. Gray, Treasurer, Penn State University to Senator Toomey (December 14, 2015); Letter of Ann M. Cannon, President, New Jersey Association of Counties, to Senators Menendez and Booker; Letter of David Bottoroff of Association of Indiana Counties and Nancy Marsh, Indiana County Treasurers' Association, to Senator Donnelly (June 5, 2015); and Letter of Matthew A. Szollossi, Executive Director, Affiliated Construction Trades of Ohio, to Senator Brown (October 24, 2015).

All issuers of municipal debt and non-government conduit borrowers are already beginning to feel the impact of the shrinkage in tax-exempt money market fund assets as a result of the floating NAV requirement. According to statistics released on April 20 by the SEC, gross yields on tax-exempt money market funds increased from eight basis points in February to 35 basis points in March.⁴ This is not good news for state and local governments, school districts, port authorities, hospitals, universities and others that have to pay more for working capital or to finance infrastructure and economic development projects that support local businesses, including contractors and engineering firms.

My second option is to borrow the money in a different form, or from a different source, than a money market fund. For example, I can go seek a loan from a bank.

Short-term borrowing in the capital markets has always been the lowest cost form of funding. This is the fundamental notion of the yield curve: short-term borrowing costs less than long-term borrowing. I would add that tax-exempt borrowing is normally less expensive than taxable loans. Thus, borrowing in the capital markets, such as from money market funds, costs less than borrowing from a bank.

For a state or local government with a good credit rating, its financing authorities could expect to pay approximately 110 basis points more to borrow from a bank than to issue debt held by a money market fund. This would be at prevailing rates of LIBOR plus 40 to 50 basis points. For example, an entity that regularly borrows \$10 million short-term through the issuance of Tax Anticipation Notes (TANs) would see its borrowing costs rise more than \$100,000 per year if the debt could not be placed with money market funds and bank credit was needed as an alternative. Other, less credit worthy borrowers who need credit enhancement could see their cost of debt increase 200 to 300 basis points.

These disruptions to financing by money market funds are occurring on top of other regulatory actions that are impacting liquidity and cost for municipal borrowing, including the Basel III bank capital rules and the SEC's proposed liquidity standards for bond mutual funds.

5 .

⁴ https://www.sec.gov/divisions/investment/mmf-statistics/mmf-statistics-2016-3.pdf

I would note that total tax-exempt assets held by money market funds were over \$500 billion as recently as 2009 and, through October of last year, most of that decline was the result of the Fed's zero interest rate policy.

As an aside, to return to my point that cash investors do not want a floating NAV money market fund:

At a time when money market funds are offering annual yields of only a handful of basis points to invest on a dollar in-dollar out basis, the stable value is a big reason why money market funds continue to hold, and attract, nearly \$2.6 trillion in assets. Again, as the Treasury Strategies' Report shows, regulators cannot force investors to invest in floating NAV funds and the Fund Sponsors themselves are not anticipating that investors will stay. Fund Sponsors are simply liquidating their tax-exempt funds, and converting the prime funds, and expecting those assets to move to government funds or elsewhere.

Now, back to the \$500 billion peak. It would be fair to assume that, absent the floating NAV requirement, once short-term rates begin to rise again, investors would flood back into taxexempt money market funds and assets could exceed \$500 billion again. That's a lot of potential liquidity for building and maintaining hospitals, schools, roads, public transportation systems, airports and other infrastructure projects. This implies that ample, low-cost funding would remain available to Idaho issuers, and your States' issuers, from tax-exempt money market funds.

There's an indirect negative consequence of the floating NAV that will also be averted by enactment of S. 1802. As funding options become more limited, the credit ratings of states and municipalities will come under pressure and potentially lead to additional costs. Rating agencies use access to capital as an important variable. When tax-exempt money market funds close and municipalities have fewer buyers for their debt, it becomes a risk factor that could lead to ratings downgrades and even higher borrowing costs.

Although I am responsible for the investment and financing activities of the Idaho State Government, I think it is also important to mention the fact that money market funds do more than just support public infrastructure investment in our State. Prime money market funds currently invest in billions of dollars of short-term commercial paper issued by Idaho businesses

to finance their payrolls and inventories, as well as the purchase of new equipment. J.P. Morgan Chase estimates that, as a result of the SEC's 2014 actions, at least \$400 billion in prime money market fund assets will be converted to funds the invest solely in U.S. Government securities.⁵ The net result will be to reduce the Federal Government's borrowing costs at the expense of main street businesses that are the backbone of our local economies.

Local Government Investment Pools

As Idaho State Treasurer, I am both a manager of, and investor in, money market funds, as well as being a borrower from them.

First, here is how the SEC floating NAV requirement impacted me as the manager, in Idaho, of an investment pool that is equivalent to a prime money market fund.

I am responsible for the management of our LGIP, which we offer to Idaho municipalities and other local government subdivisions for their cash management. It has a daily balance in excess of \$3.2 billion. LGIPs use amortized cost valuation to operate similarly to money market funds and offer their participants a stable, \$1 unit price.

Although LGIPs are exempt from registration under the Investment Company Act, and therefore not directly subject to Rule 2a-7, they are still subject to Government Accounting Standards Board (GASB) accounting principles. GASB sets accounting and financial reporting standards for external investment pools and pool participants. Until recently, GASB principles required LGIPs to follow 2a-7 like procedures. Thus, when the SEC said that "non-natural persons", such as Idaho local governments, can no longer benefit from amortized cost, our Idaho LGIP was faced with the prospect of not being able to comply with the GASB accounting principle.

This past December, GASB acted to restore amortized cost to LGIPs by issuing accounting statement No. 79.⁶ It requires LGIPs to meet many of the requirements of Rule 2a-7, such as portfolio duration and maturity, quality of portfolio assets, diversification of investments, and

⁵ See "The \$400 Billion Money-Fund Exodus With Banks in Its Crosshairs," Bloomberg Business, Feb. 23, 2016. ⁶http://www.gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASB SummaryPage&cid=1176167863852

portfolio liquidity, but "de-links" from Rule 2a-7 to permit LGIPs to continue to use amortized cost valuation and penny rounding, and thereby transact with participants at a stable NAV per unit or share.

Your enactment of S.1802 restores the stable, \$1 per share of the money market fund by enabling any money market fund to elect to continue to use the amortized cost method of valuing its portfolio.

How S. 1802 Supports Liquidity Management

Although, thanks to GASB, our LGIP is not subject to the pending floating NAV requirement of the SEC's Rule 2a-7, we are still impacted by that requirement. Like in other states, apart from LGIPs, we also invest public cash in financial instruments that meet the investment policies of our state code, as well our investment objective priorities of safety, liquidity and yield. Eligible instruments include Treasuries, U.S. Government agency securities, and stable value government and prime money market funds.

Safety of principal is the foremost objective of our investment program. That is why, in addition to Idaho's LGIP, state agencies and local municipalities also use money market funds where appropriate for specialized cash management applications. For example, at any point in time, Idaho agencies and public entities will have between \$300 and \$500 million invested in prime money market funds.

If stable value prime money market funds are no longer a permitted investment option, Treasurers will have limited choices for using pooled investment vehicles to invest in financial instruments that meet the needs of their investment programs. Further, with over \$400 billion in prime money market fund assets converting to government funds, rates on U.S. Treasuries are being driven even lower.

Even in the absence of the SEC's floating NAV requirement, liquidity management is an enormous challenge for state and local government entities. This makes enactment of S. 1802 doubly important. It will allow our liquidity management programs to continue to hold money

markets funds in their portfolios that invest in assets other than U.S. Government securities. In addition to capital preservation, it will allow us to earn market rates of return throughout budgetary and economic cycles, which benefits our citizens.

Conclusion

S. 1802 will do much to preserve Idaho's access to capital and economic development for our communities and businesses. It will preserve stable value money market funds as a safe, liquid, market-rate investment for our state's cash management needs, and as a source of capital for public infrastructure investment and businesses growth. At the same time, this legislation protects the positive changes adopted by the SEC in 2010 and 2014 that have mitigated risk in, and strengthened the resilience of, money market funds without disturbing the authority of the SEC to regulate money market funds in its discretion. In S. 1802, Congress properly exercises its discretion to draw the policy line between regulating money market funds and killing them by imposing a floating NAV requirement.

I appreciate your leadership on this issue, Mr. Chairman, and encourage the full Senate to support S. 1802 and protect the liquidity and investment options of state and local governments and all other investors.

Maintaining Public Sector Funding Access:



The Importance of Preserving Money Market Mutual Funds (MMFs)

The Power of Experience'

New MMF regulations, taking effect in October of this year, are having major negative consequences for issuers and borrowers of debt held by money market funds. Specifically, Tax-Exempt MMFs (TE MMFs) are closing and assets are leaving. This is drying up a very important municipal financing conduit.

As TE MMF funds close (or shorten their maturities), municipalities have fewer buyers for their debt. Even when they are able to place issues with the remaining TE funds, due to the shortened maturity structure, they are less able to lock in rates and more subject to weekly rate resets. This increases volatility and adds to their borrowing costs. If they are not able to place their issues with TE MMFs, only two options are available. They must turn to other lenders that have higher transaction costs or charge higher rates or they must defer or cancel infrastructure, educational/healthcare facilities or other municipal projects.

This paper will show the following, all of which demonstrate the negative impacts on municipal financing of new MMF regulation:

- Tax-Exempt MMFs are closing
- Remaining TE funds are shortening maturities
- Managers that use TE funds on behalf of their customers are exiting those funds

We estimate specifically that 30 - 50% of these assets, which is the portion originating from non-retail investors, are likely to run off. This level of run-off will profoundly reduce the short-term market for municipal debt. They will snowball into more fund closures and further tighten the municipal short-term debt market. Without Tax-Exempt MMFs, municipalities will be forced to seek higher cost borrowing like bank credit, or reduce their short-term capital consumption. Projects in infrastructure, healthcare, education and government services will be impacted.

Treasury Strategies, Inc.

309 W. Washington 1 Th Floar Chicago, illinois 60506 1+1 312-443-0840

1+1 312-443-0847

www.TreasuryStrategies.com

I. Background

MMFs have historically been an important holder of short-term municipal debt. As of December 2015, they provided nearly \$250 billion of short-term funding to municipalities by purchasing their short-term debt instruments.

Figure 1 shows the large Tax-Exempt MMF investments in municipal debt of highly populated industrial and economic centers including New York, California, Texas, Massachusetts, Illinois, and Florida.

Figure 1. Tax-Exempt Money Fund Holdings of Short-Term Municipal Debt – Top 12 States (\$B), Source: CraneData.com, December 2015



The reach of TE MMFs is even more striking when viewed in light of population. These funds represent over \$700 for every man, woman and child in the U.S. That's up to \$2,000 per household that will be lost if these funds shrink or disappear.

The impact is geographically diverse. The per capita effects are just as pronounced in Nevada, Wyoming, and Colorado as they are in New York and California.



Figure 2. Tax-Exempt Money Fund Holdings of Short-Term Municipal Debt – Top 12 States by Assets Per Capita, Source: CraneData.com (December 2015), U.S. Census

The Power of Experience'

Figure 3. Tax-Exempt Money Fund Holdings of Short-Term Municipal Debt – Top 12 States by Assets Per Occupied Housing Unit, Source: CraneData.com (December 2015), U.S. Census, ACS



As Figure 4 illustrates, these funds help finance a wide variety of important public activities. Healthcare, housing, education, and utilities each have over \$20B held by TE MMFs. If TE MMFs disappear or shrink, funding for all these sectors is at risk.







Figure 5, using Idaho as an example, illustrates the broad cross section of municipal issuers. As the table shows, TE MMFs support Idaho based healthcare, housing, industrial development, infrastructure and state and local governments. These issuers are at risk should funds continue to shrink or close.

Holding (12/31/15)	Principal	Issuer Type
IDAHO HEALTH FACILITIES AUTHORITY REVHOSPITAL (TRINITY HEALTH CREDITGROUP) SERIES 2013ID, 0.13%	10,100,000	Healthcare
Idaho Health Facilities Authority, (Series 2013ID), TOBs, (Trinity Healthcare Credit Group), 0.130%	22,805,000	Healthcare
IDAHO HOUSING & FIN ASSN	15,575,000	Housing
Idaho Housing & Finance Association Single Family Mortgage Revenue VRDO	7,615,000	Housing
IDAHO HOUSING AND FINANCE ASSOCIAT	5,850,000	Housing
IDAHO HSG & FIN ASSN NONPROFIT FAC	17,180,000	Housing
IDAHO ST HSG & FIN ASSN SF MTGE	8,935,000	Housing
IDAHO ST HSG & FIN ASSN SF MTGE REVENUE	21,295,000	Housing
Lenexa Multi-family Hsg. Rev. (Meadows Apts. Proj.) Series A, LOCFannie Mae VRDN	13,865,000	Housing
CASSIA CNTY IDAHO INDL DEV CORP REVIDB & PCR (EAST VALLEY CATTLE LLC)SERIES 2006 (LOC: COOPERATIEVECENTRALE RAIFFEISEN- BOERENLEENBANKBA), 0.05% CASSIA CNTY IDAHO INDL DEV CORP REVIDB & PCR (OAK VALLEY HEIFERS	7,000,000	Industrial
LLC)SERIES 2007 (LOC: COOPERATIEVECENTRALE RAIFFEISEN- BOERENLEENBANKBA), 0.05%	1,800,000	Industrial
Idaho Eagle Industrial Development Corps.	1,830,000	Industrial
Power County, ID IDC (J. R. Simplot Co.) , (Series 2012) Weekly VRDNs,(Rabobank Nederland NV, UtrechtLOC), 0.050%	35,000,000	Industrial
Ammon Idaho Urban Renewal Agy Var-Tax Increment-Se	1,145,000	Infrastructur
Idaho Building Authority Revenue (Prison Facilities Project) VRDO	31,215,000	Infrastructur
IDAHO ST BLDG AUTH BLDG REV	7,370,000	Infrastructur
COEUR D ALENE IDAHO	10,000,000	State / Loca
IDAHO ST	180,000,000	State / Loca
Idaho St Tans	15,550,000	State / Loca
IDAHO ST TAX ANTICIPATION NOTE	19,000,000	State / Loca
IDAHO STATE OF GO Tax Anticipation NoteSERIES 2015, 2.00%	75,000,000	State / Loca
Idaho TAN	60,000,000	State / Loca
State of Idaho	37,200,000	State / Loca

Figure 5. Tax-Exempt Money Fund Idaho-based issuers, Source: CraneData.com, December 2015 (\$B)



The Power of Experience

II. Tax-Exempt MMFs have been closing at an increasing rate

Since the announcement of the final rule in 2014 with a target implementation of October 2016, 40 Tax-Exempt MMFs have closed or announced they will close. That process has a double impact. The pace of closures is accelerating. These funds are no longer in a position to buy new municipal debt, thereby shrinking the market and also putting upward pressure on borrowing costs.

The funds that are closing have a wide reach as shown in Figure 6:

- They account for approximately \$14.4B in short-term municipal debt holdings.
- The pace of closures is increasing as implementation nears; almost twice as many funds closed in first quarter 2016 as in all of 2015.
- Many closed funds were state-specific. This means the impact of their closing is concentrated in states with multiple and large municipal debt issuers.
- Several major managers, including Deutsche Bank, Goldman Sachs and JP Morgan Chase, have significantly scaled back or exited the Tax-Exempt MMF business altogether.

Fund	Principal (\$B)	Year Closed
BofA T-E Reserves	3.70	2016
UBS RMA Tax-Free Fund	2.91	2016
UBS Select Tax-Free Capital Fund	1.54	2016
RBC T-F MMF	1.06	2016
BofA Municipal Reserves	1.05	2016
UBS RMA California Municipal Money Fund	1.02	2016
Putnam Tax-Exempt Fund	0.90	2016
UBS RMA New York Municipal Money Fund	0.75	2016
Reich & Tang CA Daily T-F	0.71	2015
Reich & Tang DIF Muni	0.63	2015
Western Asset Inst AMTFree Muni	0.62	2015
PNC Tax Exempt Money Market Fund	0.57	2016
Dreyfus NY AMT-Free Muni MMF	0.41	2015
BofA CA Tax-Exempt Reserves	0.40	2016
BofA NY Tax-Exempt Reserves	0.29	2016
State Street Instit T-F MMF	0.20	201
Goldman Sachs FS Tax-Exempt CA	0.18	2016
Touchstone OH T-F MMF	0.17	201
Alpine Municipal MMF	0.12	201

Figure 6. Funds Closed in 2015-2016 or Closing in 2016



The Power of Experience'

BofA MA Muni Reserves	0.11	2016
Goldman Sachs FS Tax-Exempt NY	0.09	2016
Dreyfus BASIC NY Muni MMF	0.09	2015
Dreyfus NY AMT-Free MuniCashMgt	0.09	2015
Dreyfus BASIC Muni MMF	0.07	2015
BofA CT Muni Reserves	0.05	2016
BlackRock NC Muni MMP	0.05	2015
Putnam Tax-Exempt Money Market Fund	0.04	2016
Deutsche NY Tax Free Money Fund	0.03	2016
Touchstone T-F MMF	0.03	2015
BlackRock NJ Muni MMP	0.02	2015
BlackRock VA Muni MMP	0.02	2015
Western Asset CT Muni MMF	0.02	2015

Figure 7 highlights the impacts on individual issuers embedded in these TE MMF closings. For example:

• The Illinois Finance Authority and New York State Dormitory Authority are large issuers that provide low-cost financing to public agencies and non-profits. Each has issued \$200M+ in debt that is being held by TE MMFs that are closing.

Figure 7. Largest Individual Issuers of Short-Term Municipal Debt
Impacted by 2016 Fund Closings (\$M)

Issuer	Principal (\$M)
Illinois Finance Authority	267
New York State Dormitory Authority	219
New York City, NY Municipal Water Finance Authority	163
California Health Facilities Financing Authority	156
New York State Housing Finance Agency	154
City of Rochester, MN	145
California Statewide Communities Development Authority	142
City & County of Denver, CO	129
Missouri State Health & Educational Facilities Authority	113
New York City, NY Housing Development Corp.	109



The Power of Experience'

Figure 8 highlights the impacts on specific states embedded in these TE MMF closings.

 New York, California, and Texas each have \$1B+ in issues held in funds that are closing



Figure 8. States Most Impacted by 2016 Fund Closings – Top 12 States (\$B) Source: CraneData.com, December 2015 (\$B)

Figure 9 highlights the impacts on the sectors embedded in these TE MMF closings.

 Education, healthcare, utilities and housing sectors all have over \$1B+ of issues in funds that are closing, nationwide

7



Figure 9. Industry Sectors Most Impacted by 2016 Fund Closings – Top 10 Sectors (\$B) Source: CraneData.com, December 2015 (\$B)

The Power of Experience

III. TE MMFs are shortening portfolio maturities

Fund companies are anticipating further investor redemptions as they approach the October 2016 rule implementation. To prepare for asset run-off, they are scaling back buying municipal debt in the all important six- to twelve-month maturity range.

In our consulting practice, we have encountered municipalities that have struggled to issue debt with longer than six-month maturity. Our direct experience includes a school district and a bridge commission. This supports the notion that funds want more liquidity on hand to redeem investors expected to exit Tax-Exempt MMFs as October 2016 approaches.

Portfolio holding data confirms the anecdotal evidence. Tax-Exempt MMF managers are shortening their portfolios around the implementation date. In March 2016, six-month or longer securities in TE MMFs were less than a third of September 2014 levels (3% vs. 10%).

This is more pointed when compared to Prime Retail or Prime Institutional funds, especially over the most recent four months. Not surprisingly, Prime Institutional funds, which are also impacted by the rules, saw a similar decline. Prime Retail funds – those least impacted by the new regulations – declined the least of these fund types.



Figure 10. Portion of MMF Portfolio Holdings with Six-Month or Longer Maturity

The Power of Experience

IV. Managers using TE funds on behalf of their customers are exiting

As they formulated the new MMF rules, regulators believed Tax-Exempt MMFs were held almost exclusively by retail investors. This was important, because the new rules were aimed at what are commonly called institutional funds – those used by corporates, institutions and trusts (called non-natural persons).¹

The thinking was that if these non-natural persons did not invest in Tax-Exempt MMFs, then TE funds would see little impact, and municipal finance would be unharmed. However, this key assumption is incorrect. Not only are **significant portions of Tax-Exempt MMFs held by non-natural persons**, but the business is already adjusting in ways that will hurt municipal borrowers.

To delve into this issue, we conducted a two-part examination:

- First, we had discussions with managers from six of the largest U.S. taxexempt fund companies that collectively represent 60% of all such assets.
- Second, to validate those findings, we surveyed 21 financial intermediaries that invest in TE MMFs, including nine of the 50 largest U.S. banks.

Fund Managers

From discussions with fund managers, we have estimated that non-natural persons hold a material portion – at least 30% to 50% – of TE MMF assets. Only one manager thought its fund had less than 30% institutional ownership.

Fund managers tell us they expect that virtually all such non-natural person investors in Tax-Exempt funds to leave. Reasons given range from operational difficulties to investment policy restrictions, driven primarily by the new regulations. As the new rules force such investors to exit, Tax-Exempt MMF asset levels will shrink and many funds will close.

> Figure 11. Estimated TE MMF Assets Held by Institutional Investors, Source: Treasury Strategies Interviews of Top Fund Managers, February 2016

Fund Manager	Estimated % of TE MMF Assets Owned by Institutional Investors
#1	30%
#2	35%
#3	15%
#4	45%
# 5	50%
# 6	30%



¹ Non-natural persons include entitles such as partnerships, LLCs, irrevocable trusts, corporations, and institutions

The Power of Experience⁴

Financial Intermediaries

Information from Financial Intermediaries (FIs), who direct customer investments into Tax-Exempt MMFs, also paints a troubling picture for the future of these funds. Tax-Exempt MMF usage by FIs is likely to plummet.

According to FIs, non-natural persons account for almost two-thirds of the assets that they place in Tax-Exempt MMFs. Many FIs plan to cease offering Tax-Exempt Funds to any client, due to the complexity, difficulty and risk of determining which clients are natural versus non-natural investors. For others, the new rules make it impossible to continue offering Tax-Exempt funds to customers as an option on their sweep platforms. Accordingly, FIs will fully or substantially eliminate their use of Tax-Exempt MMFs on behalf of their customers.

This is a double-edged sword for municipal finance. First, lower investment in Tax-Exempt MMFs translates directly to reduced outlets for municipal borrowing. Secondly, at these significant levels of asset reduction, many TE funds will fall below efficient operating levels, and will close entirely – a trend we have already noted is underway.



V. Conclusion

New SEC rules that change how MMFs function are having many unintended consequences. One such consequence now manifesting itself is a material reduction in the short-term credit available to municipal borrowers whose debt is held by Tax-Exempt MMFs.

As recently as mid-2015, Tax-Exempt MMF assets exceeded \$250B. As market participants prepare for new regulations to become effective, TE funds are closing at an increasing rate, Financial Intermediaries are pulling customers out of TE funds, and sweep products are eliminating TE funds as an investment option.

30 - 50% of these assets, which is the portion originating from non-retail investors, are likely to run off. This level of run-off will profoundly reduce the short-term market for municipal debt. They will snowball into more fund closures and further tighten the municipal short-term debt market. Without Tax-Exempt MMFs, municipalities will be forced to seek higher cost borrowing like bank credit, or reduce their short-term capital consumption.



The Power of Experience'