GIOA Update

Winter 2013

NEWS *from the* GOVERNMENT INVESTMENT OFFICERS ASSOCIATION

Muni Bond Market a Political Pawn in 2013

BY LIZ FARMER, GOVERNING

Bond investors breathed a sigh of relief when the last-minute fiscal cliff deal in January left municipal bonds untouched. But experts say that 2013 will still be a minefield of uncertainty for those investors as the tax debate in Washington, D.C. and financial volatility at home for some states will raise questions about market stability.

Whether Congress would remove the tax free status of municipal bond interest was the number one threat to those bonds at the end of 2012 and a new year has not changed that, experts say. The tax exemption on municipal bond interest allows states and localities to issue the bonds at a lower interest rate, making it cheaper to borrow money for key infrastructure projects. But the exemption comes at a cost of about $40 billion annually in lost revenue to the U.S. Treasury, according to some estimates.

As the debate on Capitol Hill is framed around tax reform and deficit cutting, some believe municipal bonds will become a casualty. Eric Silva, legislative

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counsel to the Council of Development Finance Agencies, notes that President Barack Obama's State of the Union speech scheduled for Feb. 12 will likely outline his approach to the debate.

"Further reductions in spending have to come with a balanced approach [meaning more revenue] and for us that means, I believe, a threat to municipal bonds," Silva says during a webinar hosted this month by CDFA. Obama has previously touted a proposal that would put a cap on deductions for singles earning more than $200,000 and couples earning more than $250,000.

Chris Mauro, head of U.S. municipals strategy for RBC Capital Markets, notes in a recent paper that Republicans and Speaker of the House John Boehner want any tax reform package to focus almost entirely on spending cuts rather than balancing cuts with additional revenue.

"If the President and the Democrats win this ideological debate and the tax code is modified to generate additional revenue, the threat to the muni exemption will, we believe, be considerable," Mauro writes. "If instead, a revenue neutral tax package is the aim, state and local government officials stand a much better chance of defending the muni exemption."

Prior to the fiscal cliff deal, Boehner had reportedly been open to eliminating the exemption for high income earners. But now that Congressional Republicans have already agreed allow the top marginal income tax rate to increase, it is unlikely they'll submit to more.

"Several Republicans have been particularly vocal about their opposition to additional tax revenues of any kind," Mauro notes. "This sentiment was exemplified most recently by Senate Minority leader Mitch McConnell who said that, 'The tax issue is finished. Over. Complete.'"

However, the overall market also faces a threat as the Republican caucus "is pretty firm on using the [Mar. 1] debt ceiling deadline as leverage to squeeze more spending cuts," Silva says. If Congress fails to raise the debt ceiling, "there could be significant market disruption and ratings effect."

"The sentiment at local level… is that there is a desire to continue building infrastructure, continue paying for teachers and improved local services," she says. "It is not completely bleak out there."

Bond ratings also stand to take a hit in states that fail to take action on their own financial woes. Natalie Cohen, managing director at Wells Fargo Securities, notes during the CDFA webinar that ratings agencies are starting to figure unfunded liabilities into their assessments. The most recent example is Fitch Ratings' warning last week that placed Illinois general obligation A-rated bonds on a negative watch after the state failed to pass pension plan reform in January. Illinois' pension is about 40 percent funded, according to Fitch.

Cohen added that new disclosure rules issued by the Municipal Securities Rulemaking Board that will kick in this year will also put the spotlight on pensions.

"Much more of the unfunded liability is going to be reflected on the balance sheet so that will draw additional attention to the funding levels," she says.

Still, most localities are enjoying more stability and a positive outlook as Cohen adds many voters in November approved bond issuances for local projects.

"The sentiment at local level… is that there is a desire to continue building infrastructure, continue paying for teachers and improved local services," she says. "It is not completely bleak out there."

And Mauro notes that on the national level, it is entirely possible municipal bonds will remain untouched in 2013 and 2014 as debate rages on.

"In the current political environment, this outcome seems to us to be just as likely as any other," he says. ■

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The Final Days of the "New Normal"

ANETA MARKOWSKA
CHIEF US ECONOMIST, SOCIETE GENERALE

It has been our longstanding view that 2013 will see an inflection point on growth. After sequential deleveraging of households, small businesses, state and local governments and now the federal government, the structural headwinds to growth are beginning to fade. (Admittedly, fiscal deleveraging is only beginning, but we believe that the modest drag will be offset by improving private sector fundamentals). Whereas we doubted previous growth spurts in US data (and argued for QE3 last spring when most doubted it), we believe that this time the improvement is for real. We expect this to be a breakout year for the US economy, with growth firmly above trend by the end of the year. Ironically, the Fed's harsh lessons from the previous false starts (i.e. premature exit talk) have led them to adopt a far more accommodative reaction function with a goal of dampening the bond market's reaction to any data improvements. It remains to be seen whether this will work or not.

In accordance with the Fed's qualitative guidance on asset purchases, and despite our increasingly optimistic outlook for the US economy, we are with consensus and expect balance sheet expansion to continue through the end of the year. Nonetheless, we think that the watershed moment for the markets – or the realization that the economy is finally breaking away from trend growth and the days of QE are numbered – is likely to occur much earlier. With this realization, bond yields should bottom out and begin their gradual normalization toward fair values.

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Where is fair value?

Our models for the 10 year Treasury yield are grounded in rational expectations hypothesis, where long-term rates are a function of expected real interest rates, inflation expectations and a term premium. Since none of these components are directly observable, we follow the standard practice of using various proxies. This traditional approach suggests current fair values in the range of 3.0%-3.4%. Based on our economic forecasts, and assuming that long-term inflation expectations remain stable, the projected fair value range rises to 3.1%-3.8% by the end of 2013, and to 3.3%-4.0% by the end of 2014.

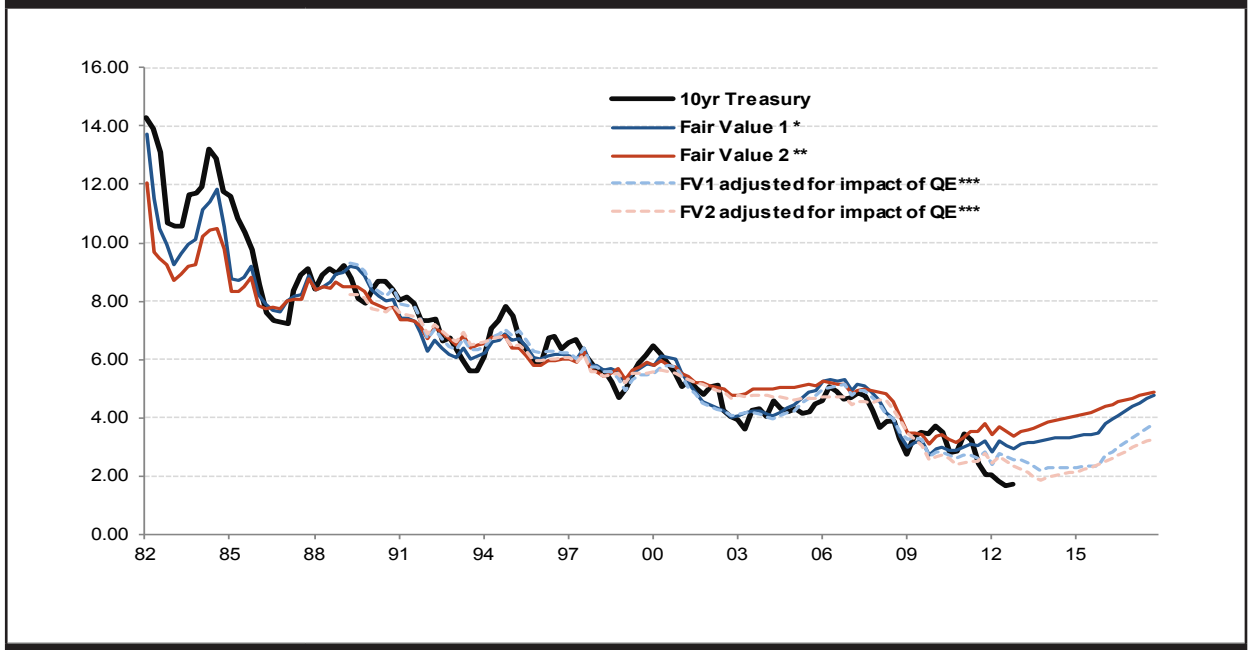
Of course these are significantly higher than today's rates and one of the obvious reasons is the dislocation caused by the Fed's purchases. Indeed, including the Fed's balance sheet in the various models lowers the fair value range significantly, putting it at 2.3%-2.6%, or about 70bps below the standard fair values. This is broadly consistent with the Fed's own estimates of the cumulative impact of QE to date. If our projections of SOMA holdings are correct (see Chart 2), the total impact is likely to peak around 140bps as additional asset purchases continue to depress the term premia. That said, we acknowledge our simple linear model does not capture diminishing returns of QE. Additionally, the forward looking nature of the markets means that the impact of future asset purchases may already be largely discounted in today's rate levels (hence the undershoot even relative to our adjusted fair values).

We expect this to be a breakout year for the US economy, with growth firmly above trend by the end of the year.

Stock vs. flow effects?

If QE has truly dislocated the Treasury market by 70bps-140bps, the unwind could be quite dramatic. The mainstream view, however, and one that has been strongly endorsed by the Fed, is that the impact of QE is driven by stock, rather than flow effects. Therefore, the 70bps+ of term premium compression will be unwound only as the assets are sold. (Alternatively,

Chart 1: Treasury fair values and their projections



Source: SG Cross Asset Research, Economics

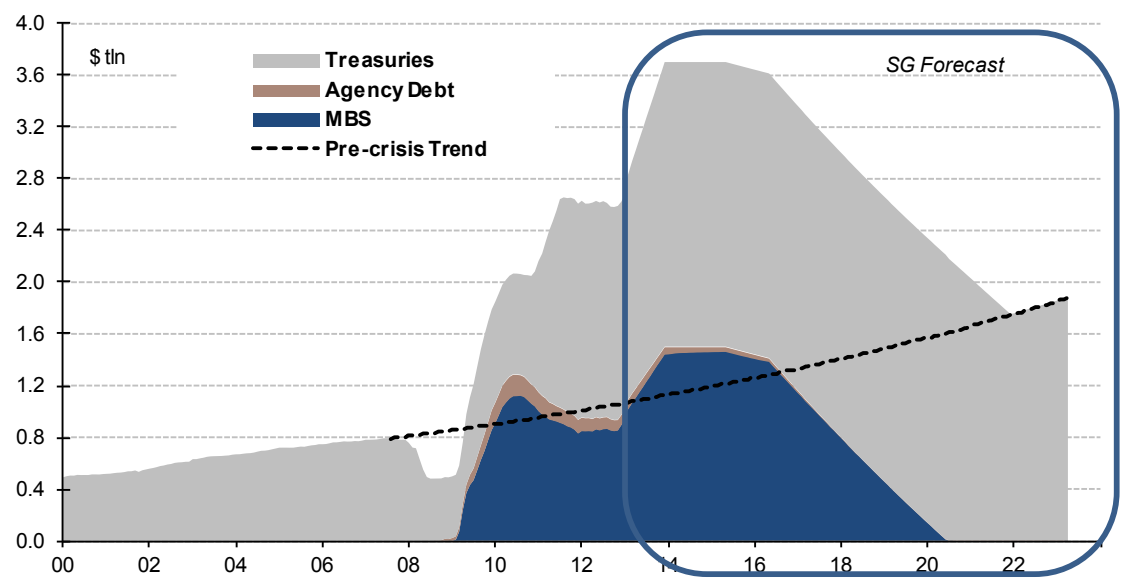
the passage of time could also erode the impact over time as the economy grows into the enlarged Fed balance sheet. This is demonstrated by the extension of the pre-ciris trend on Chart 2 which assumes that SOMA holdings would normally grow in line with trend nominal GDP). Either way, the stock theory suggests that the convergence of Treasury yields back to fundamental fair values will be very gradual. This is demonstrated in our adjusted fair value projections which, after falling initially on the back of further QE, don't hit 3% until 2016 (and note that by then the unadjusted fair value range is at 4.20%-4.60%).

Our central scenario, which calls for a 10yr Treasury yield of 2.75% by year-end, effectively splits the difference between fundamental fair values and those adjusted by the impact of QE. This means that we allow for some flow effects, or put differently, we expect that the markets will front run the Fed and discount asset sales long before they materialize.

Timing? Triggers?

Unlike the gradual forecast projected by econometric models, markets tend to move much more quickly. We assume – in agreement with our rate strategists – that the watershed moment for Treasuries is most likely to occur during Q3, or just after the middle of the year. This is roughly six months ahead of the anticipated end of QE, but at the same time allows some time for more consistently positive data. In the early part of the year, the performance of the economy could be more lumpy as improving private sector fundamentals "compete" with the adverse impact of payroll tax increases and potentially with the sequester starting March 1. Capturing these anticipated events, as well as European developments, we look for the 10yr Treasury to sell off toward 2.20% by the end of the quarter, then rally back to 2.0% around June, and sell off more meaningfully thereafter. ■

Chart 2: SOMA portfolio and projections

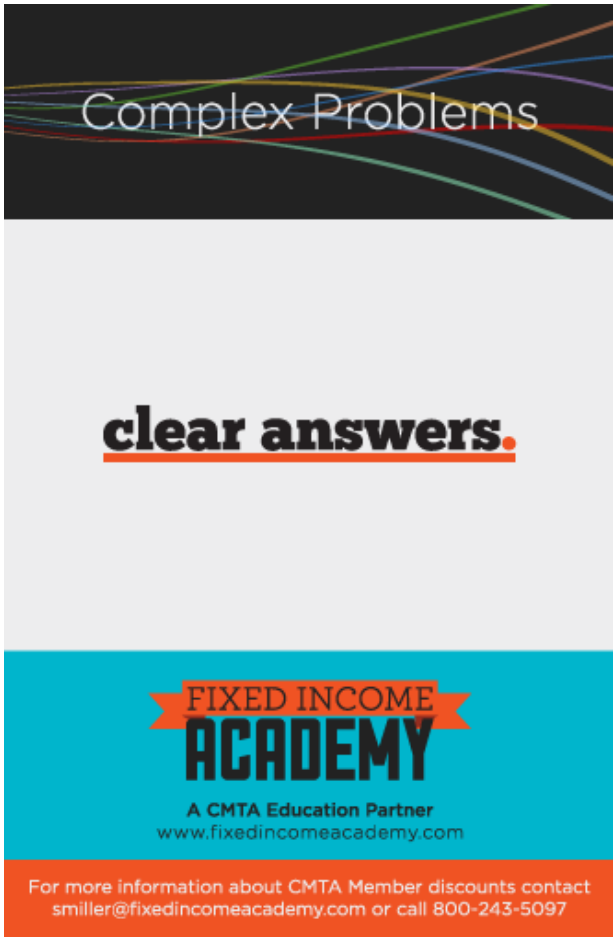


Source: SG Cross Asset Research, Economics

EARN 44 CPE Credits in 2013!

As you know, we have partnered with Fixed Income Academy as a way to further our mission and provide additional educational opportunities for our members. We are excited about the deal we worked out to allow you to sign up for bond school when registering for this year's conference. Their $1,650 program is only $1,275 for GIOA members and, as an additional bonus, Fixed Income Academy will create a **GIOA Member Only** session of bond school **if** 25 or more enroll. Our own session gives us the ability to collaborate with colleagues and deliver GIOA-only content to you all year long, so we encourage you to check it out and consider becoming a Certified Fixed Income Practitioner before our 10th anniversary celebration in 2014 and earn 40 CPE credits. For more information and offer details visit www.gioa.us. For more about bond school visit www.fixedincomeacademy.com or email an FIA representative at bondschool@fixedincomeacademy.com.

We are also pleased to report that FIA is working with several of our speakers to qualify select sessions for continuing education credits at no additional cost for all attendees. So if you are looking for CPE, Fixed Income Academy (approved by NASBA as a sponsor of self-study and live delivery courses) will provide the documentation at the conference for 3 of the sessions for an expected 4 credit hours. For more information, contact Maurine Day at mday@gioa.us or Susan Munson at smunson@fixedincomeacademy.com.



Risk, Liquidity and Alternative Assets

DAVID TURKINGTON, CFA
Managing Director, State Street Associates

In the current environment of low yields and economic uncertainty, many investors are contemplating increased allocations to alternatives. Alternative asset classes such as private equity, property, and hedge funds may offer a range of benefits, but they also present analytical challenges. These types of investments often differ from traditional asset classes in three important ways:

1. **Iliquidity.** The investment vehicles are illiquid due to lock-up requirements or high costs associated with exiting.

2. **Appraisal-based pricing**. The underlying assets do not transact frequently, and benchmark indices based on appraisal pricing may understate risk and correlation.

3. **Performance fees**. Incentive fees reduce up-side, which may also understate risk and correlation.

At State Street Associates, we have developed tools to address each of these challenges. This research is discussed in detail in a new paper in the Journal of Portfolio Management: "Liquidity and Portfolio Choice: A Unified Approach," by Will Kinlaw, Mark Kritzman and David Turkington. In this shorter article, I will highlight some key points and important issues to consider.

Risk measurement

It is easy to underestimate the risk of alternative assets. For example suppose we want to measure the annual volatility of a real estate investment using historical data. Benchmark indices for real estate are commonly based on appraisals or stale prices because the underlying properties do not trade frequently. Appraisals rely, in part, on prices for similar properties that have sold in the past, which essentially "smooths out" price fluctuations from one quarter to the next. This smoothing will have little to no effect on investment returns over multiple years, but it will dampen short term fluctuations and distort simple volatility estimates. For example, the annualized volatility (standard deviation) of quarterly NCREIF U.S. property index returns from 1983 to 2012 was 4%. Meanwhile, the annual volatility based on calendar-year returns for the same index was 8%, and the annualized volatility based on non-overlapping five year holding periods was 16%. To measure risk more accurately, we can use statistical techniques to reverse-engineer the effects of appraisal-based smoothing.

Performance fees may also bias volatility estimates. Incentive fees charged on outperformance will not reduce the risk of loss, but they will dampen simple volatility estimates because they reduce the size of positive returns. To measure risk more accurately, we can reverse-engineer the returns that prevailed before fees, or use measures of downside risk which are less prone to distortion.

In fact, the impact of smoothing and performance fees goes beyond individual asset volatility; they can also understate the true correlation of alternative investments with other assets in the portfolio. Therefore, these adjustments are important when analyzing portfolio-level risk and diversification.

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Liquidity

Investors benefit from the ability to trade certain assets and suffer from the inability to trade others. We propose that investors treat liquidity as a shadow allocation which is already present in their portfolio, but which should be explicitly acknowledged. Disregarding liquidity is akin to ignoring one's liabilities or tax status; the resulting asset mix will almost surely be sub-optimal.

Investors use liquidity to play both "offense" and "defense." When liquidity is used to improve a portfolio's risk-adjusted return beyond that of the initial allocation, we should recognize a shadow liquidity benefit that is attached to tradable assets. When liquidity is used simply to restore the integrity of the original portfolio, we should recognize a shadow illiquidity cost that is attached to non-tradable assets. This framework neatly unifies the concepts of absolute illiquidity (where we cannot attach trading benefits) and partial illiquidity (where we can attach benefits but reduce their size to account for transaction costs).

It is easy to underestimate the risk of alternative assets.

There are many possible uses for liquidity. Common examples include rebalancing, engaging in market timing, or meeting capital calls. A key point is that in all cases, the impact of liquidity can be measured in the same units used to make other portfolio decisions: return and risk. It is then quite intuitive to incorporate this information into any asset allocation framework.

Above all, our approach highlights that there is no one-size-fits-all solution. By using simulations to project the many ways assets might perform, allocations might drift, capital demands might arise, and the opportunities to exploit liquidity along the way, investors can quantify the return and risk of their own unique shadow liquidity allocations, and use this information to build better portfolios. ■

FUN FACT$

- Think the $1 bill is insignificant? Think again. One dollar bills account for 45% of all notes printed, making the $1 bill the most commonly printed.
- In 1861, when the U.S. issued its first major issue of paper currency, each note had to be signed by hand by representatives of the Register of the Treasury of the Treasurer.

  Handwritten signatures lasted only one year, when signers complaining of writer's cramp petitioned for new legislation allowing the signatures to be engraved and printed right on the currency.
- The government prints roughly 8 billion notes each and every year, enough to stretch around the equator... 30 times.

WHO KNEW?

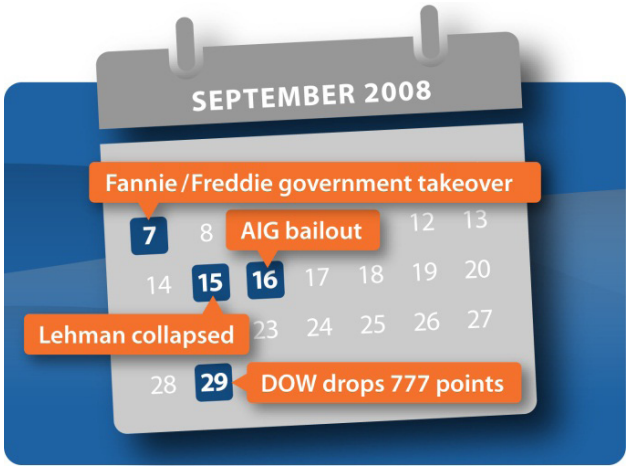
Three Best — Practices for Every Government Investment Officer

Imperatives for Creating and Implementing an Ideal Investment Reporting Framework

BY TYLER HOGGE, CLEARWATER ANALYTICS

Government investment and accounting professionals face incredible pressure when it comes to managing the portfolios under their charge. Accounting rules change, markets swing, prices move, credit ratings shift overnight, and auditors scrutinize. And the call for faster, better, and leaner public institutions means any government-related activity—including investment management—is under the microscope.

As your world becomes more complex, the demand for public accountability grows. As stewards of the public trust, it's not only imperative that you know what investments you own—but also that the investment information is reconciled, accurate, consolidated, easy to compile, and easy to share with internal stakeholders and the public. And ideally, your system shouldn't be based on manual processes.



Government entities of all types have found that a top-notch investment reporting process is needed to meet these demands. In this brief article, we outline three best practices for investment reporting for government entities.

1. Be Fast And Agile

Provide information on a daily basis. While many accounting and finance professionals within the government sphere do not look at holdings information daily, and many argue that they don't need to, having daily access to up-to-date data is an insurance policy in case something does happen. Odds are that a shift in the market that prompts an immediate holdings assessment may not conveniently happen at month end.

Reconcile daily to ensure custody data is timely, accurate, and complete. It is the custody bank's business to clear transactions; not to reconcile them. As a result, custody banks cannot ensure accuracy when reconciling cash, positions, and transactions. When dealing with millions of bits of data, something will inevitably fall through the cracks due to incorrect entries, often at the hands of rushed, manual input. By having a framework in place that reconciles cash and positions to the bank daily (at the lot level), those mistakes can be caught early and immediately reconciled. If you reconcile daily, closing books at month-end is significantly easier.

2. Be Automated

Minimize manual efforts. Manual entry, by virtue, is prone to human error. Given the time required for manually entering data into complicated spreadsheets or legacy software, little time is left for review and revision. As a result, the first version of what is entered into these spreadsheets often ends up serving as the book of record. Ultimately, these errors compound over time, making month end more of a hunting exercise than a time to focus on expanding data into useful reports. Manual data entry also takes time. By automating the process end to end, accounting and finance professionals can focus on making decisions rather than rekeying data. This is a case where time saved equals time earned.

3. Be Scalable

Make room for change. Because government investment officers are asked to do more with less, and because investment portfolio sizes often fluctuate, investment accounting and reporting processes should

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be flexible enough to accommodate changes in investment tactics, new regulatory requirements, and internal restructuring--without stretching IT resources. In short, the operational framework and its systems should solve problems without creating new ones.

Rigid, disparate investment accounting and reporting systems can inhibit portfolio flexibility and your ability to manage it. They discourage investment managers from adding new types of assets as your institution's needs for cash evolve and change. The operations platform needs to be flexible enough to absorb change seamlessly (such as more securities or accounts), add managers, add asset classes, and more. Many government investment officers have chosen not to invest in an approved new investment type, just because of the reporting or accounting headache it may cause!

Offloading tasks is a viable option. Many government institutions simply do not have the necessary personnel to implement a fully scalable operational structure. That doesn't mean operational scalability is out of reach. Many organizations are turning to outsourced models, such as installed solutions, hosted versions, or Software-as-a-Service (SaaS) models. There are clear benefits to the SaaS model when it comes to investment accounting and reporting; in particular, the ability to be nimble and react to changes is an advantage in both the market and the regulatory environment. Installed solutions take longer to implement and require regular, manual updates to the software itself and, in some cases, to the hardware as well. SaaS solutions are often ideal for a rapidly evolving regulatory environment and will help you avoid the use of ever-decreasing IT resources to meet your institution's demands. ■

FUN FACT$

- Martha Washington has the distinction of being the only woman whose portrait has ever graced U.S. currency. Martha made an appearance on $1 Silver Certificates in 1886, 1891, and 1896.
- The U.S. has not changed the historic figures on paper currency since 1929. Should a vacancy open, deceased applicants need only apply. U.S. law, passed in 1866, prohibits portraits of any living person on currency.
- The U.S. dollar is popular around the globe. In the U.S., the $1 and $20 bills are the most common. Around the globe, the $100 bill is the most common.
- Every note, regardless of value, weighs 1 gram. That means 454 bills will equal one pound.
- Every piece of U.S. paper currency ever issued since 1861 is valid and legal tender. The U.S. has never devalued or recalled currency.
- The term "greenback" came from non-interest-bearing notes called Demand Notes, issued by the U.S. in 1861. These notes, with their green backs, were used to finance the Civil War.

WHO KNEW?

GIOA CONFERENCE AGENDA — 2013

Wednesday, March 13, 2013
Pre-Conference Workshop
(Conference Held in the Main Ballrooms)

9:00 am	**Registration and Continental Breakfast**
9:30 am	**Fixed Income Boot Camp** State and Local Economic Update — An update of state and local revenues and issues facing municipalities. **Lindsey Piegza, FTN Financial** An interactive discussion on public fund investing: callables vs. bullets, step-ups, floaters, corporates, benchmarking, reporting, and other important fixed income topics. **Rick Phillips** **FTN Financial Capital Markets**
10:45 am	**Refreshment Break**
11:00 am	**Fixed Income Boot Camp (continued)**
12:15 pm	**Lunch Provided** ***Diablos Cantina – Second Floor Balcony (Near main entrance/East side)***
1:30 pm	**Money Market Strategies and Credit Analysis** An in-depth discussion of the Money Market Funds industry. The speaker will address the new rules, if any, that are put in place and how they will impact public fund portfolios. **Paige M. Wilhelm** **Federated Investment Management Co.**
3:00 pm	**Refreshment Break**
3:15 pm	**Peer to Peer – Best Practices Discussion** This peer-to-peer best practices discussion aims to make participants aware of what other investment officers are doing. Investment officers will have time to ask questions, compare their practices with their peers, and learn more innovative ideas to bring home and implement in their work place. 1 – Ethics 2 – Criteria for Approving Broker/Dealers 3 – Managing Expectations 4 – Counterparty Analysis
4:00 pm	**Pre-Conference Workshop Concludes**
5:00-7:30 pm	**Welcome Cocktail Reception** (All Attendees) Mingle with other attendees for cocktails and hors d'oeuvres in a relaxed atmosphere outside on the Terrace overlooking the lights of the Las Vegas Strip. ***Monte Carlo Terrace (Main entrance/East side)***

Thursday, March 14, 2013
(Conference Held in the Main Ballrooms)

7:45 am	**Registration Starts — Full Buffet Breakfast**
8:15 am	**Founder's Welcome** **Rick Phillips, President** **FTN Main Street Advisors** **President's Welcome** **Laura Glenn, CFA** **Portfolio Officer, State of Georgia**
8:30 am	**Economic Update (1)** In our economic outlook presentation, we will address the various headwinds continuing to weigh on growth in the U.S. We will also discuss the evolving fiscal and monetary policy environments and how they are affecting growth and interest rates. **Craig I. Dismuke, Vining Sparks IBG**
9:15 am	**Demographics and Financial Trends** A fascinating discussion of future demographic and financial trends and what their effects might be on your entity's tax revenues, workforce, and finances. **Doug Robinson,** **RCM Robinson Capital Management**
10:00 am	**Refreshment Break**
10:30 am	**Cyber Security** A must hear! Mike will provide a brief refresher from last year's overview on the evolution of cyber-crime and pose the question, "What will 2013 look like?" He will also have a summary of the past twelve months on important trends in online fraud. **Michael West, Fidelity Investments**
11:15 am	**Keynote Speaker** What's ahead for treasury issuance and possible new treasury securities (floaters, callables, etc.). **Matthew Rutherford** **U.S. Department of the Treasury's** **Assistant Secretary for Financial Markets**
12:15 pm	**Lunch Provided** ***Monte Carlo Terrace (Main entrance/East side)***

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Thursday, March 14, 2013 (continued)

1:45 pm	**Agency Updates** You're probably wondering what the future holds for the GSEs. This session will provide the answers, straight from the entities themselves. **FNMA, FFCB, FHLB, FHLMC, FAMAC**
3:00 pm	**Refreshment Break**
3:15 pm	**Dissecting a Bank's Balance Sheet** The speaker will discuss how to evaluate banks by examining a bank's financial statements and will address the various risks that banks face, including regulatory reform and various macro factors. **Bill O'Neill, CFA** **Income Research + Management**
4:00 pm	**Political Update** With Washington D.C. status quo post-election, the speaker will address how national policies will impact the national economy as well as state and local governments.
4:45 pm	**Thursday Session Concludes**
5:30 - 8:00 pm	**March Madness Get-Together** Big-screen basketball, food, and fun! A great opportunity to get to know your public investment peers and broker community. ***The Pub at Monte Carlo*** ***(Located on the Street of Dreams)***

Friday, March 15, 2013 (Conference Held in the Main Ballrooms)

8:00 am	**Registration Starts** **Full Buffet Breakfast**
8:30 am	**Economic Update (2)** In our economic outlook presentation, we will address the various headwinds continuing to weigh on growth in the U.S. We will also discuss the evolving fiscal and monetary policy environments and how they are affecting growth and interest rates. **Julia Coronado, BNP Paribas**
9:15 am	**Securitization** An overview of the process of securitizing assets; how they're structured, how they're issued, how to analyze MBS and ABS, etc. **Nikki Baldonieri,** **Pierpont Securities LLC**
10:00 am	**Refreshment Break**
10:15 am	**Investing In & Analyzing Muni Debt** The speakers will discuss fundamental and technical market dynamics that will drive the municipal bond market in 2013. **Tom Weyl, Barclays** **Ben Watkins, State of Florida**
11:00 am	**Conference Concludes**