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Corrected Note (First published 06 June 2014)

Municipals

- **Municipals largely performed inline with Treasuries despite somewhat elevated supply and expected higher volume next week**
- **AA rated municipals outperformed AA Corporates for the week by 3bps-7bps out through 10yrs on the curve, and were marginally better in the longer portion of the market**
- **We expect the first two weeks of June to produce $15.4bn of supply, which is above last year's $12.8bn but lower than the trailing three year average of $16.1bn for the period**
- **Year-to-date, municipal bond funds have received $4.9bn in net inflows, with $1.4bn in inflows this week**
- **Next week's anticipated $8.5bn in primary volume (Exhibit 2) would be higher than this week's $6.9bn and YTD non-holiday average weekly issuance of $5.4bn**
- **Puerto Rico's Economic Activity Index dropped 1.3% on a YOY basis in April following a 1% YOY decrease in March**
- **There are currently 16 states that explicitly authorize a municipality to file bankruptcy, 12 states that have conditional or limited authorization, 21 that do not specifically authorize and only 1 (Georgia) that prohibits bankruptcy**
- **In Central Falls RI, the state's intervention to elevate GO bondholders with a priority lien was a decisive step in ensuring a favorable bondholder outcome**
- **In Harrisburg PA, we found high hurdles imposed by the state to file bankruptcy incentivized creditors to negotiate outside of court and avoid costly, drawn out litigation in bankruptcy**
- **The San Bernardino CA case is notable given that it's the first California city to challenge the immunity of the CalPERS pension contracts in bankruptcy**

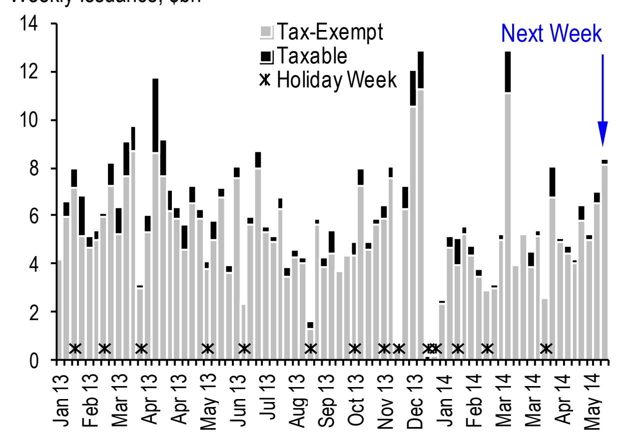
Exhibit 1: Municipals largely performed inline with Treasuries this week

	HG Municipal Yields		Treasury Yields		HG Muni/Tsy Ratio	
Sector	Current (%)	1wk chg (bps)	Current (%)	1wk chg (bps)	Ratio (%)	change (% pts)
2yr	0.30	1	0.40	3	75	-3
5yr	1.23	8	1.63	10	75	0
10yr	2.27	11	2.57	10	88	1
30yr	3.36	10	3.42	9	98	0

Source: Thomson Reuters, J.P. Morgan.

Exhibit 2: We expect $8.5bn in long-term issuance next week

Weekly Issuance, $bn



Source: IPREO, Bloomberg

June supply through next week is expected to be higher than last year but lower than the trailing three year average for the period

The supply demand dynamic in the municipal market appears to be fairly balanced heading into next week. This week, municipals largely performed inline with Treasuries despite somewhat elevated supply and expected higher volume next week. AA rated municipals outperformed AA Corporates for the week by 3bps-7bps out through 10yrs on the curve, and were marginally better in the longer portion of the market.

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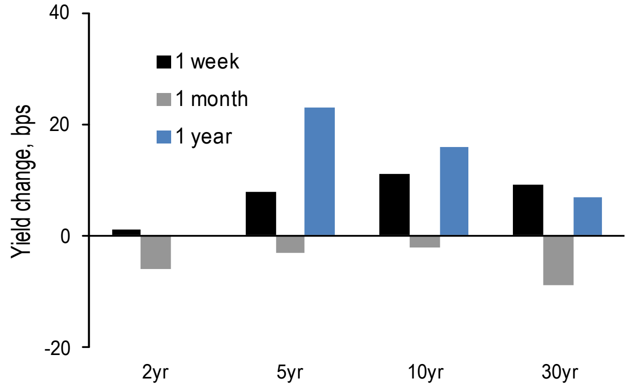
Markets at a glance

5yr HG yields have increased by 23bps over the past year



Long dated tax-exempts appear rich versus both Treasuries and Corporates, over a 12 month horizon

AAA tax-exempt yield / Treasury yield (%)	Last	Min	Max	Mean	St. Dev.	Z-score 3mo	Z-score 12mo
2yr	78.8	67.3	111.7	85.2	9.3	-0.7	-1.3
5yr	75.8	65.1	77.9	73.4	3.7	0.7	-0.6
10yr	87.9	83.5	93.1	88.3	2.7	-0.2	-1.2
30yr	97.9	96.0	104.1	100.2	2.4	-0.9	**-1.6**

values over last 3 months displayed, as of 05/29/2014, Z-Score +/- 1.5 Cheap / Rich

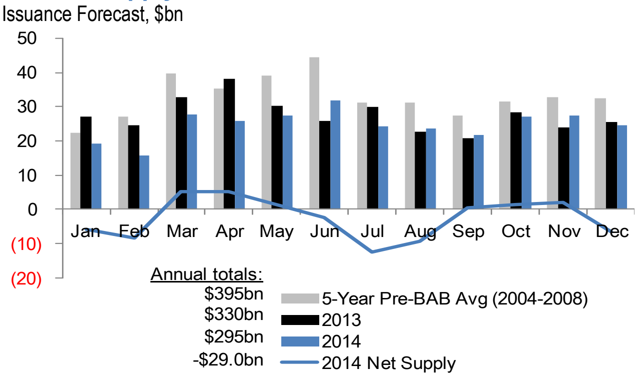
AA corporate yield - AA tax-exempt yield (bp)	Last	Min	Max	Mean	St. Dev.	Z-score 3mo	Z-score 12mo
3-5yr	68.4	56.6	85.2	67.7	7.0	0.1	-0.3
5-7yr	87.9	75.9	103.8	88.1	7.0	0.0	0.1
7-10yr	86.8	70.4	100.6	85.6	7.3	0.2	0.5
25yr	80.6	56.2	85.6	69.7	8.9	1.2	**1.6**

values over last 3 months displayed, as of 6/06/2014, Z-Score +/- 1.5 Rich / Cheap

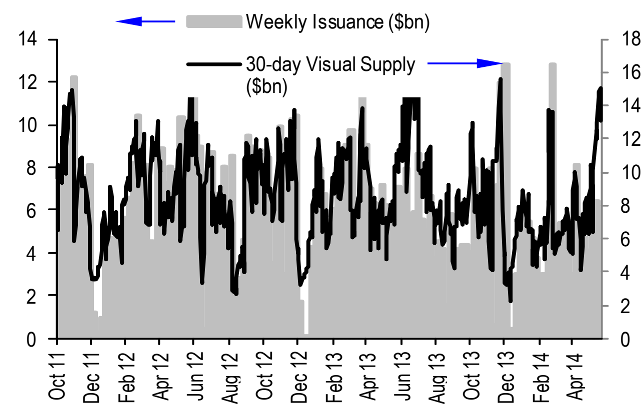
indicates rich | indicates cheap

We forecast $295bn in gross long-term supply for 2014, with net supply of -$29.0bn

Issuance Forecast, $bn



30-day visual supply has remains high at $13bn



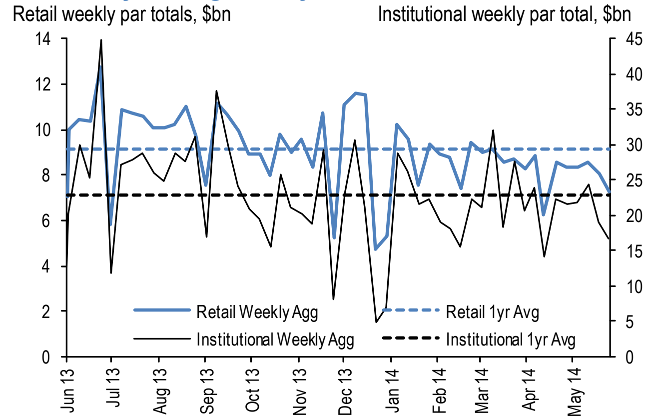
We expect 10yr HG municipal yields to reach 2.77% by year-end

Treasury	6/6/2014	1 Month Ahead	3Q14 Forecast	4Q14 Forecast	1Q15 Forecast
2yr	**0.40**	0.40	0.70	0.90	1.00
5yr	**1.64**	1.65	2.25	2.45	2.55
10yr	**2.58**	2.65	3.00	3.20	3.30
30yr	**3.42**	3.45	3.70	3.85	3.95
AAA Tax-exempt	**6/6/2014**	**1 Month Ahead**	**3Q14 Forecast**	**4Q14 Forecast**	**1Q15 Forecast**
2yr	**0.30**	0.30	0.62	0.76	0.82
5yr	**1.23**	1.26	1.99	2.05	2.10
10yr	**2.27**	2.31	2.72	2.77	2.90
30yr	**3.36**	3.36	3.71	3.80	3.90

Treasury and Municipal rate forecast, Yields, %, as of 6/06/2014

Secondary trading activity continues to be subdued

Retail weekly par totals, $bn   Institutional weekly par total, $bn



Source: Thomson Reuters, Bloomberg, S&P, J.P. Morgan
Par Values traded are as reported by MSRB on 06/05/2014, with the volume for Friday estimated as the average volume over the previous four Fridays.

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We expect the first two weeks of June to produce $15.4bn of supply, which is above last year's $12.8bn but lower than the trailing three year average of $16.1bn for the period.

Next week's anticipated $8.5bn in primary volume (Exhibit 2) would be higher than this week's $6.9bn and YTD non-holiday average weekly issuance of $5.4bn. Next week's expected volume however, is equal to the average weekly issuance for the second week of June ($8.5bn) over the past three years.

The three largest deals next week are the $1.7bn Los Angeles Unified School District (Aa2/AA-/-) GO Refunding deal in California, the $850mn City of New York (Aa2/AA/AA) GO deal, and the $528mn City of Houston Combined Utility System (-/AA/AA) Revenue Refunding Bonds in Texas. **The Los Angeles Unified School District last issued GO debt on 05/08/2012, and its (5% coupon, 2025 maturity, July 2022 Par Call, 544646J94) GO bonds are evaluated at a 2.60% yield or a 22bps spread to the high grade scale.**

The City of New York last issued GO bonds on 03/25/2014 and its (5% coupon, 2025 maturity, March 2024 Par call, 64966LKP5) tax-exempt GO bonds are currently evaluated at a 2.79% yield or a spread of 41bps to the high grade scale. The City of Houston's Combined Utility System last issued Revenue bonds on 04/01/2014 and it's (5% coupon, 2025 maturity, May 2024 Par Call, 4424354B6) bonds are currently evaluated at a 2.62% yield or a 24bps spread to the high grade scale.

Year-to-date, municipal bond funds have received $4.9mn in net inflows, following this week's $1.4bn of inflows

For the period ending 06/04/2014, combined monthly and weekly reporting municipal bond funds indicated inflows of $1.4bn, taking YTD aggregate flows to $4.9bn (Exhibit 3). Among the larger fund sub-categories, Intermediate funds indicated $758mn in net new investment, Long Term funds took in $327mn of net new cash, and High Yield funds received $146mn in net new capital. YTD, **High Yield funds and Intermediate funds have both received inflows totaling $4.8bn**. Long Term funds show YTD outflows totaling $1.7bn.

Exhibit 3: Municipal bond funds indicated $1.4bn in inflows this week, taking YTD flows to $4.9bn

	Fund flows		Fund Assets	
Type of funds	Actual	4-wk. avg.	Actual	4-wk. avg.
All term muni funds	1,442	783	547,782	545,086
New York	31	-15	30,187	30,101
California	212	58	53,723	53,449
National funds	1,216	800	393,905	391,666
High Yield	146	293	60,908	60,406
Intermediate	758	354	134,022	132,926
Long Term	327	306	300,193	299,003
Tax-exempt money market	2,591	128	258,267	257,143
Taxable money market	-2,795	-2,488	2,214,806	2,218,678
Taxable Fixed Income	9,855	5,367	4,029,021	4,011,825
Equity	10,372	3,182	8,587,072	8,481,304

Source: Lipper US Fund Flow

Weekly reporting municipal bond funds indicated inflows of $192mn. Among the larger weekly reporting fund sub-categories, **High Yield funds received $146mn of inflows**, Intermediate funds took in $59mn in net new cash, and Long Term funds saw $35mn in net new investment.

California specific municipal funds saw $212mn of inflows following last weeks $7mn of outflows. New York specific funds recorded $31mn of inflows, following last week's outflows of $16mn.

For the period, Tax-exempt money market funds reported $2.6bn of inflows while **Taxable money market funds reported $2.8bn of outflows**.

Taxable Fixed Income funds had inflows of $9.9bn, taking their YTD total inflows to $74.6bn. **Equity funds (US & Global) indicated $10.4bn of inflows, taking their YTD total receipts to $115bn.**

The Puerto Rico Economic Activity Index dropped 1.3% on a YOY basis in April following a 1% YOY decrease in March

The Puerto Rico Economic Activity Index ("EAI") declined 1.3% on a YOY basis in October, following a 1.0% YOY decline in March. Additionally, the FY 2014 YTD (July-April) change showed a reduction of 3.3% as compared to the same figure for FY 2013.

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Digging deeper into the numbers, the April non-farm payroll showed a slight 0.2%YOY increase but was 1.5% lower YTD as compared to the same period last year. Also showing a YOY increase was the preliminary gasoline consumption figure which was reported to be 0.8% higher on a YOY basis but declined 2.1% YTD compared to the corresponding figure last year.

The largest decline came from cement sales for April, which showed a YOY decline of 17.5% or 14.6% YTD, while electric power generation recorded a 2.0% YOY decline or 3.1% less YTD.

State bankruptcy authorization for Chapter 9

Understanding the policy backdrop relating to state specific bankruptcy authorization or lack thereof, is of key importance when analyzing the credit quality of financially distressed municipalities across the nation. **Policy at the state level can greatly influence whether or not a municipality in distress successfully files for bankruptcy and their treatment in the courts.**

Over the last several years, there have been several illustrative cases whereby financially distressed local government bondholders have received varied recovery rates depending on several key factors such as the bondholder's status as secured or unsecured, state-bankruptcy policies, and the court's interpretation of various creditor protections. **Despite these outcomes, many aspects of Chapter 9 of the Bankruptcy Code (Exhibit 4) remain susceptible to the interpretations of elected officials, appointed intermediaries (i.e. emergency managers), and the courts. The mixed outcomes that have emerged in the recent past have not always provided a conclusive, clear-cut precedent.**

The Bankruptcy Reform Act of 1994 stipulates that for a municipality to file for bankruptcy, it must meet certain statutory requirements including specific authority from its state governments. According to Moody's, **there are currently 16 states that explicitly authorize a municipality to file bankruptcy, 12 states that have conditional or limited authorization, 21 that do not specifically authorize, and only 1 (Georgia) that prohibits bankruptcy (Exhibit 5).**

Exhibit 4: Eligibility to file a Chapter 9 Petition

In order to file for protection under chapter 9, an entity must meet the following statutory requirements:

1. The debtor filing for chapter 9 protection **must qualify under the definition of a municipality**. This is strictly enforced, as evidenced by the objection of the petition filed by Orange Country Investment Pool. States cannot petition for protection under chapter 9.
2. The municipality **must be located in a state that authorizes** chapter 9 proceedings (see map).
3. The municipality **must be insolvent**. The court uses a cash flow test for insolvency, rather than a balance sheet test.
4. The municipality **must voluntarily file** for protection. No entity can be forced into chapter 9 bankruptcy.
5. The municipality **must have already attempted to avoid filing**, meaning they have done one of the following:
   i. Obtained agreement of a majority of creditors that will be impaired
   ii. Failed to obtain agreement in good faith negotiations with creditors
   iii. Demonstrated that such negotiations are impractical.
   iv. Reasonably believed a creditor to have attempted to obtain a prepetition preferential transfer.

Source: The Handbook of Municipal Bonds, 2008

For the 28 states that do allow their municipalities to file, the requirements for entering bankruptcy vary significantly and in certain cases deter distressed municipalities from using bankruptcy protection as an option. **In New Jersey, for example, struggling municipalities must first appear before the Local Finance Board with a recovery plan before they can file.** In addition, authorization of any petition has to be approved by 2/3 of all members of the Local Finance Board by written endorsement.

Similarly, Pennsylvania grants filers authority only after one of these five conditions are met (1) recommendation by the plan coordinator (2) imminent inability to provide health or safety services to citizens (3) unsuccessful restructuring negotiations with creditors for 10 days (4) distress only solvable by utilizing the Federal Municipal Debt Readjustment Act or (5) the majority of the governing body fails to carry out the recommendations of the coordinator.

More recently, Pennsylvania passed an additional statute (Act 47) prohibiting distressed cities from seeking bankruptcy protection, essentiality creating an additional

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hurdle for municipalities to file. **As seen in Harrisburg, Act 47 provided the city with alternative options allowing it to emerge from receivership outside of the bankruptcy process, with direct investors in bond debt paid in full, either by bond insurers or back-up guarantors. The average recovery rate for the insurers and guarantors was 75%.** We discuss Harrisburg in more detail later in this document.

Unlike Chapter 7 and 11 for corporate borrowers, the bankruptcy code stipulates that a municipality cannot be forced into bankruptcy by its creditors even if creditors can demonstrate insolvency. It is the municipality's sole discretion to voluntarily pursue bankruptcy protection. Additionally, of the 28 states that allows their municipalities to file for bankruptcy, seven (**Connecticut, Florida, Louisiana, Michigan, New Jersey, North Carolina, Ohio**) require the Chapter 9 filing to be first signed off by a third party such as a governor or commission.

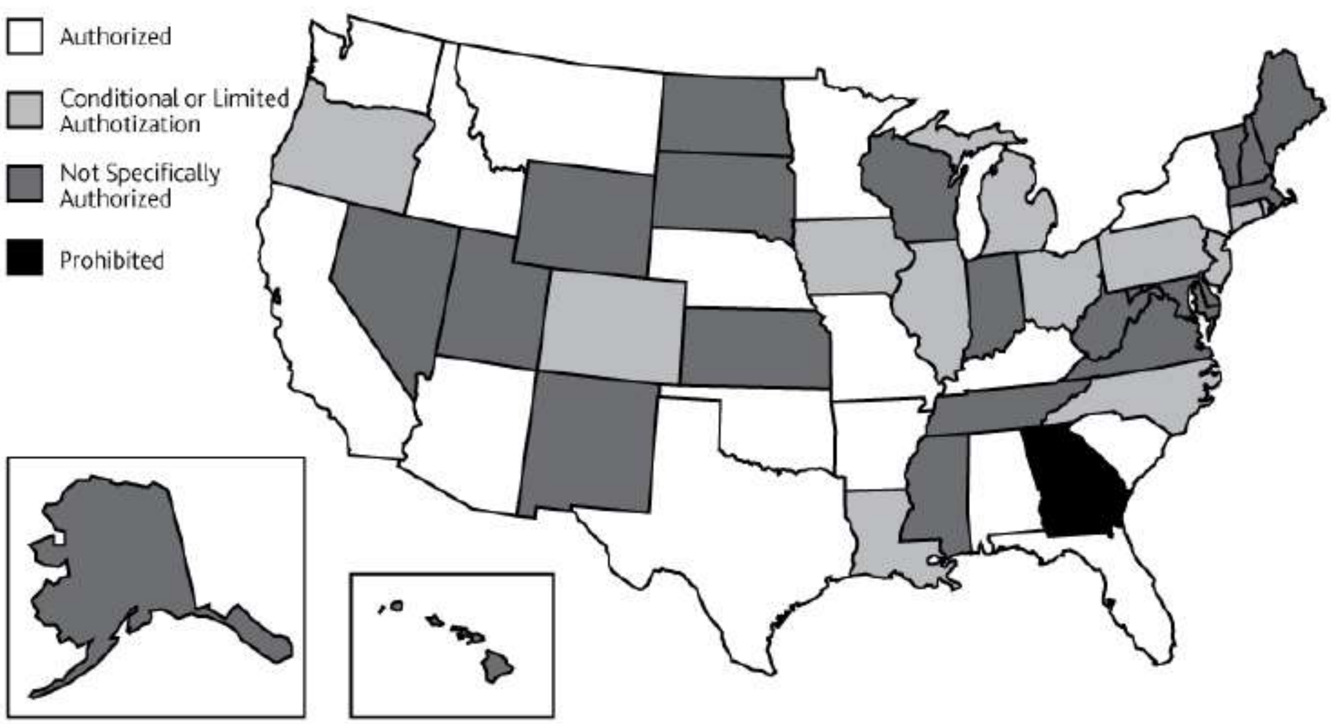
Some states that expressly authorize municipalities to file for bankruptcy protection, may expose bondholders to the bankruptcy process without an exhaustive consideration of viable alternatives.

While Chapter 9 cases are relatively rare, with few cases to learn from, below we highlight precedent setting proceedings and case studies that may provide investors with more insight into distressed local governments across the country. **We believe that strict conditions imposed by certain states on their respective municipalities before being allowed to enter bankruptcy may deter distressed municipalities from seeking bankruptcy protection thereby sparing stakeholders and creditors from the expensive litigation process and incentivizing creditors to negotiate in good faith early in the process.**

Bankruptcy guidelines are a critical part of credit evaluation for distressed credit; Not all filings are created equal

The nature and characteristics of GO pledges among states can vary significantly. Exhibit 6 shows the

Exhibit 5: **State Authorization for Municipal Bankruptcy Filings**



Source: Moody's

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characteristics of the GO pledges for the states of the distressed municipalities discussed in this writing. While specific bankruptcy cases may provide insight into the strength and meaning of the GO pledge for *a particular state*, the interpretation of the pledge and ruling is *not binding* for courts in other states. **Municipal issuers in the 22 states (Exhibit 5) that do not permit or give specific authorization for municipal bankruptcy may be relatively more immune to contagion from potentially unfavorable rulings in landmark cases such as Detroit**. Additionally, there can be substantially different outcomes as exemplified by recent cases in Central Falls, RI, Harrisburg, PA and San Bernardino, CA, which raise key credit considerations for investors. **In Central Falls RI, the state's intervention to elevate GO bondholders with a priority lien was a decisive step in ensuring a favorable bondholder outcome.**

In Harrisburg PA, we found high hurdles imposed by the state to file bankruptcy incentivized creditors to negotiate outside of court and avoid costly, drawn out litigation in bankruptcy. The San Bernardino CA case is notable given that it's the first California city to challenge the immunity of the CalPERS pension contracts in bankruptcy.

Central Falls, RI

On August 1, 2011, the City of Central Falls, RI filed for Chapter 9 bankruptcy protection. The filing was a result of a very weak financial position strained by a combination of state aid reduction, inaccurate budget assumptions, and growing fixed costs including contractual salary increases and pension obligations.

Prior to the filing, the State of Rhode Island passed new legislation outlining procedures for aiding municipalities in distress including a state appointed receiver with the power of fiscal overseer including the power to file for bankruptcy. **The state additionally provided general obligation bondholders with a priority lien on municipal revenues, elevating their status in bankruptcy**. Under the municipal lien statute, the city emerged from bankruptcy without a haircut to bondholders, possibly setting a strong precedent for other distressed Rhode Island cities. See our report from 05/09/2014 for additional analysis of the statutory lien in Rhode Island.

As this case illustrates, there is no consistent approach to creditor protection, rather, each state's bankruptcy rules are defined by their individual constitution and related legislation. **Variation in the treatment of creditors may lie in the vast differences in priorities among the creditors (Insurance companies, Banks, Individuals, municipal stakeholders) themselves, elected officials, appointed intermediaries (i.e. emergency managers),**

Exhibit 6: Nature and characteristics of GO pledges vary significantly among states

State	Michigan	California	Pennsylvania	Rhode Island	Alabama
Limited Tax and/or Unlimited Tax	Both	Unlimited	Both	Unlimited	Limited
Separate levy dedicated to debt service	Yes*	Yes	No	No	No
Pledged revenues held separately for benefit of bondholders only	Yes *	Yes **	No	No	No
Full Faith and Credit	Yes	No	Yes	Yes	Yes
Statutory Lien	No	Yes ***	No	Yes	No
Authorized for bankruptcy protection	Conditional/ Limited	Yes	Conditional/ Limited	Conditional/ Limited	Yes

* This is true for GO Unlimited Tax bonds, but not GO Limited Tax bonds
** This applies to all school and community college districts. For cities, it applies on a case-by-case basis.
*** California has unique statutory language that applies to a broad range of general obligation unlimited tax pledges. This language has had the practical effect of creating a lien on those revenues even though the statute does not refer to the perfecting of a security interest.

Source: Moody's

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and the courts.

Harrisburg, PA

The City of Harrisburg, PA emerged from state receivership in March 2014 following several years of default and distress for the city and its troubled waste-to-energy incinerator**. The City ultimately filed for bankruptcy protection but the filing was dismissed on that the City did not receive state authorization before filing.** The city ultimately negotiated a settlement with GO creditors on December 23, 2013 with creditors receiving an average 75% recovery rate.

The case in Harrisburg illustrates the value of state authorization as a condition of Chapter 9 protection. The Harrisburg case exemplifies the high hurdles municipalities can face when petitioning the court for relief specifically in states that require authorization for Chapter 9. Additionally, avoiding the Bankruptcy process allowed for an expedited negotiation process and incentivized creditors to negotiate in good faith, avoiding the expensive and drawn-out legal process. This outcome may provide a model for other distressed municipalities in the state.

California specifically authorizes its municipalities to file for Chapter 9 bankruptcy, unlike the States of Rhode Island and Pennsylvania. This may be a contributing factor in the large number of California filings. **According to Moody's, since the City of Vallejo, CA bankruptcy in 2008, more cities have sought bankruptcy protection under Chapter 9 than at any time since the law's inception in 1937.**

In 2011, the State of California passed legislation (AB506) in an attempt to deter municipalities from seeking bankruptcy protection within the State. According to Moody's, while the legislation was in theory intended as a tool to avoid bankruptcy, "the law's explicit instruction to negotiate with creditors, including bondholders, appears to condone, if not normalize, less than full and timely payment to bondholders".

In the three cases where AB506 has been tested, it did not deter bankruptcy. In addition, San Bernardino was able to avoided AB 506 through a declaration of fiscal emergency. Over the past 5 years, 53 California cities (11% of all California cities) have declared a fiscal emergency thereby avoiding AB 506 requirements.

Despite the recovery plans in Vallejo and Central Falls bankruptcies, the legal treatment and strength of municipal bond pledges remains untested since the parties settled out of court rather than as directed by a court ruling. We expect the respective state treatment of certain creditor classes, primarily bondholder and pensioners, to begin to take shape with the evolution and outcomes of cases such as Stockton, San Bernardino, and Detroit.

Courts interpretation of constitutionally protected pension benefits in California and Michigan continue to evolve

In California and Michigan, the courts interpretation of the constitutional protections afforded to pensioners varies and continues to evolve as Stockton, San Bernardino, and Detroit each work their way through bankruptcy proceedings. California case law recognizes public pension rights as governed by statute as **"a contractual obligation of the employing public entity, which may not be destroyed, once vested, without impairing a contractual obligation of the employing public entity"** (Exhibit 7). As you'll see in the following cases, California cities have largely avoided the issue of whether or not pension contracts can be altered or impaired in bankruptcy.

In Detroit, Federal Judge Rhodes ruled that city pension contracts can be included in the bankruptcy estate, essentially allowing for federal bankruptcy law to trump state constitutional protections for pensions (Exhibit 8). The Tenth Amendment to the United States Constitution, states the principal of federalism reserving sovereign powers to the States or the people (Exhibit 9). Interestingly this ruling provides for an evolving debating surrounding the ability for pension contracts to be impaired in Chapter 9 bankruptcy and will undoubtedly have an impact on bondholder treatment in bankruptcy proceedings.

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Exhibit 7: Pension benefits in California are treated as a contractual right that may not be destroyed without impairing a contractual obligation

"A public employee's pension constitutes an element of compensation, and a vested **contractual right** to pension benefits accrues upon acceptance of employment. Such a pension **may not be destroyed**, once vested, **without imparing a contractual obligation** of the employing public entity"

Source: *Gutierrez v. Board of Retirement*, 72 Cal.Rptr.2d 837 (1998); *Betts v. Board of Admin.*, 582 P.2d 614 (Cal. 1978)

Exhibit 8: In Detroit, Federal judge Rhodes ruled

§ 24 Public pension plans and retirement systems, obligation. Sec. 24. The accrued financial benefits of each pension plan and retirement system of the state and its political subdivisions shall be a contractual obligation thereof which shall not be diminished or impaired thereby.

Source: *Gutierrez v. Board of Retirement*, 72 Cal.Rptr.2d 837 (1998); *Betts v. Board of Admin.*, 582 P.2d 614 (Cal. 1978)

Exhibit 9: Federal Constitution preserves state sovereignty under the 10th Amendment

Amendment X The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people

Source: *Gutierrez v. Board of Retirement*, 72 Cal.Rptr.2d 837 (1998); *Betts v. Board of Admin.*, 582 P.2d 614 (Cal. 1978)

Vallejo, CA

The City of Vallejo, CA, which spent three and a half years in bankruptcy protection, continues to struggle with mounting pension liabilities. Importantly, the City's Bankruptcy did not result in the renegotiation of contractual terms with pensioners, which is the city's largest class of creditors. **Vallejo's salary and benefit costs equaled 78% of its budget in 2008 and increased to 82% in 2012, immediately following the city's formal exit from bankruptcy.**

The city still faces a structural deficit of $3.8mn, equal to 4.3% of expected expenditures for FY2013. As a result, the rating agencies have noted that without pension relief Vallejo is at risk of returning to insolvency. The City of Vallejo's dire circumstances continues to be discussed in Stockton and San Bernardino proceedings as the courts hash out the relative protections of key creditor classes.

Stockton, CA

In June 2012, the City of Stockton, CA filed for Chapter 9 bankruptcy protection, which was at the time the largest filing of any US city by population. The City was also the first California city to use the state's new AB 506 mediation process.

On October 3, 2013, the City approved its plan of adjustment to emerge from Chapter 9 with various recovery rates for creditors depending on their structure and security type (Exhibit 10). Stockton's outstanding bonds include lease-backed and pension obligation bonds, which are insured and cover approximately 90% of the city's outstanding debt.

A major takeaway is that the leases are subject to legislative appropriations with recovery rates ranging from 1% to 100% depending on the essentiality of the underlying assets of the various leases. Leases secured by city functions such as fire, police and other administrative functions are expected to receive 100% of principal and interest while bonds secured by revenues of parking structures, Stockton Arena, and an office building, that includes city hall, receive lower recoveries. The city has one series of uninsured lease revenue bonds backed by golf courses, a park, and city appropriation pledge. The City is proposing to pay only 1% with possible increases if the facilities return to profitability.

Consistent with our expectations, the **city is treating the bondholders of the city's water and sewer and special tax bonds as unimpaired, secured by "special revenues" not subject to a restructuring of appropriation backed obligations. Importantly, Stockton does not establish how strong California's GO pledge is because the City does not have any GO debt.**

As for the pension obligation bonds, the city's settlement **with Assured equates to a 50% recovery.** Similar to Vallejo, Stockton has not proposed any pension reform in its Chapter 9 exit plan leaving CalPERS an unimpaired creditor. Despite this, Judge Christopher Klein indicated that he will need persuading that a plan of adjustment leaving the CalPERS arrangement intact is effective, alluding the uncertain fate of Vallejo post Chapter 9.

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Additionally, one creditor filed an objection to the city's proposed plan hoping to force Stockton to negotiate with other creditors for lower payments arguing that the plan does not constitute "fair and equitable treatment". If the judge agrees with the creditor's position, Stockton could restart negotiations with other creditors or introduce a new adjustment plan possibly including haircuts to creditors who are unimpaired under the current plan.

San Bernardino, CA

On July 10th 2012, the City of San Bernardino, CA voted to approve a bankruptcy filing, citing depleted general fund reserves. Prior to voting to file for bankruptcy, the City declared a fiscal emergency, reduced the workforce by 20%, negotiated with new hires after October 2011 to pay the full employee share of pension costs, and negotiated temporary compensation reductions with employees none of which sufficiently stemmed the City's issues.

As San Bernardino has not yet released a bankruptcy plan, it is unclear how their debt will be treated at this time. **San Bernardino had $223.2mn of outstanding bonded debt as of FY10, including $12.4mn of Lease Revenue Bonds, $131.8mn of Tax Allocation Bonds, $95k of Assessment District Bonds, $31.0mn of COPs, and $47.9m of Pension Obligation Bonds**. Much of the City's debt is unrated, with the exception of the 1997 Lease Revenue Bonds (C by S&P) and the 2006 Tax Allocation Bonds (BBB by S&P). **Many of the bond series are insured (86%)**, however, with AMBAC insuring $87.2mn, AGM $65.4mn, and Natl Re $40.1mn. As evidence of how quickly the City moved towards bankruptcy, S&P downgraded the 1997 Lease Revenue Bonds by 12 notches from BBB+ to C on August 2, 2012.

San Bernardino bypassed the AB 506 process by declaring a fiscal emergency on July 18, 2012, and filed for Chapter 9 protection on August 1, 2012. San Bernardino's option to forgo the AB 506 process has not been without consequence. San Bernardino sought an expedited objection deadline of September 21, 2012, to its bankruptcy petition. Creditors balked at the shortened deadline, saying that San Bernardino has not provided them with sufficient financial information to evaluate

Exhibit 10: Stockton proposed recovery plan

Debt Issue	Underlying Asset	Amt Outstanding ($000)	Insured	Recovery as % of Oustanding Debt
Series 2006 Lease Revenue Bonds	Administrative buildings, parking and city repayment promise	11,270	NPFG	100%
Series 2003A and B Certificates of Participation	Fire, police and library properties and city repayment promise	12,265	Ambac	100%
Series 2004 RDA	Stockton Arena, tax increment and city repayment promise	44,615	NPFG	95%
Series 2004 Lease Revenue Bonds	Larkign garages and city repayment promise	38,870	NPFG	77%
Pension Obligation Bonds (Series 2007A and B)	Unconditional repayment promise	121,770	AGM	50%-55%
VRDB Lease Revenue Bonds (Series 2007A and B)	Office building and city repayment promise	40,035	AGM	Uncertain*
Series 2009A Capital Improvement Lease Revenue Bonds	Golf course, park and city repayment promise	34,555	None	1%**

Source: Moody's
Note:*City will transfer office building to Assured Guaranty, which can sell it. In exchange, Assured will extinguish the city's obligation to repay Liquidation value uncertain.
**Possibly higher if bondholder is able to run golf courses and park to profit

San Bernardino's bankruptcy eligibility, especially given that San Bernardino did not go through the AB 506 process. Additionally, there may be larger issues that have recently come to light as for 13 of the past 16 years the City Council had been given falsified budget documents. The misleading budget information claimed that San Bernardino was operating within its budget when in fact it had been deficit spending.

Creditors have suggested, and will likely argue, that San Bernardino is not eligible for Chapter 9 protection because of its failure to previously negotiate with creditors holding at least a majority of each class of debt as required under the Bankruptcy

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Code. However, San Bernardino will likely rely on its fiscal emergency to argue that negotiations with creditors were impracticable and therefore not a requirement for its eligibility. Additionally, the lack of legitimate budget figures may prove to impede **San Bernardino's ability to devise a plan for the adjustment of its debt, or in the very least delay San Bernardino's emergence from Chapter 9**.

Unlike, Stockton, the City suspended payments to the state pension fund and its largest creditor, CalPERS, who then challenged the proposal, arguing that pension contributions were exempt from bankruptcy protection. Although a federal judge overseeing the petition rebuffed these efforts, the parties reaches an agreement and the city resumed payments to CalPERS in July 2013.

At issue currently is the $17mn in back payments and penalties that San Bernardino failed to make between declaring bankruptcy and resuming payments. **While CalPERS claims it is owed in full, the City argues that all city creditors must share in the pain, essentially putting into question the status of CalPERS claims on the City's revenues.** While mediators report "significant and substantial progress" in negotiations between the two parties, **CalPERS continues to pursue an appeal challenging the City's eligibility for bankruptcy with a hearing expect to take place in August 2014.**

In the Detroit case, Federal court Judge Rhodes ruled that federal laws took precedence in the bankruptcy preceding so the benefits of city workers in Detroit could be reduced. **In California, CalPERS claims that the ruling in Detroit does not set a legal precedence in the State of California. CalPERS argues that it is an agency of the state and that pension system contributions and workers benefits are protected by State statutes.** We will continue to monitor the unfolding of San Bernardino and Stockton's bankruptcy proceedings as they test the status of pension obligations in relation to bonded debt.

Detroit, MI

In Detroit, a court decision putting pensions in the bankruptcy estate was significant because it was **a first-ever test of the state's constitutional provisions regarding pensions**.

Exhibit 11: Currently Proposed Recovery Rates for Detroit creditors

	Proposed Recovery
General Obligation ULT	74%
General Obligation ULT	10-13%
COP's	0% (repudiation)
COP related swap	30%
Water and Sewer Revenue	Distressed Exchange*
Distributable State Aid (GO ULT, LT)	Unimpaired
Unfunded Pensions	>90%

Source: Moody's, Office of the Emergency Manager ("Proposal For Creditors") May 5th, 2014
*Distressed exchange as currently proposed would not impair principal

Detroit reached a tentative settlement with insurers on approximately $388mn of Unlimited Tax General Obligation (GO) debt, which effectively sets a 74% recovery rate on debt service. The insurers agreed to allow the city to redirect 26% of the taxes due them to certain retirees, according to the Judge in the City's bankruptcy case. This reflects a significant improvement from the Unlimited Tax GO bonds original recovery rate of 15% for unsecured bondholders (Exhibit 11).

More importantly, as currently proposed, there is a significant difference in proposed recovery rates for GO Unlimited Tax (~74%) bondholders and GO Limited Tax bondholders (~10% to13%) despite the similar liens on property tax revenues. Although we recognize that the unlimited tax pledge reflects a stronger pledge than a limited tax pledge, the approximate 65% difference in proposed recovery rates remains substantial.

In January 2014 the City filed a motion with the bankruptcy court to invalidate $1.45bn of Pension Obligation Certificates of Participation (COPs) arguing that the debt was issued illegally by violating the city's statutory debt limit, despite the legal disclosure at the time of issuance to the contrary. Additionally a successful repudiation may actually lead to a return of bond proceeds since they were used to fund the city's previously unfunded pension liabilities, which would severely weaken the funded status of the city's pension plans. Although the judge could ultimately deny the proposed COP repudiation, the proposal stands in stark

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Exhibit 12: Emergency Mangers breakout of secured and unsecured claims

Secured Claims	Unsecured Claims
Debt	
Limited Tax* (LT) GO - $379.3mn	Limited Tax* (LT) GO - $161.0mn
Unlimited Tax** (ULT) GO - $100.0mn	Unlimited Tax** (ULT) GO - $369.1mn
Water bonds - $2.5bn	Pension Debt - $1.43bn
Water State Revolving Fund - $21.4mn	Notes/loans payable - $33.6mn
Sewer bonds - $2.8bn	
Sewer State Revolving Fund - $472.8mn	
Parking bonds - $9.3mn	
Notes payable - $87.8mn	
Swap MTM - $343.6mn	
Sub total: $6.7bn	*Sub total: $2.0bn*
Pensions and OPEBs	
	OPEB - $5.7bn
	Unfunded Pension (PFRS) - $1.4bn
	Unfunded Pension (DGRS) - $2.0bn
	Sub total: $9.2bn
Other	
	Other - $264.6mn
	Sub total: $264.6mn
Total	
$6.7bn	*$11.4bn*

Source: Office of the Emergency Manager ("Proposal For Creditors"), June 14, 2013

contrast to Stockton's proposal to payout Pension Obligations COPs at 50%.

On April 11 2014, Detroit reached a settlement with UBS and Merrill Lynch on the Pension COP swap termination payments. **The agreement calls for Detroit to pay the counterparties $85mn, or an approximate 30% recovery rate off of $288mn**, down significantly from the **original $230mn offer proposed in October (approximately 80%recovery rate)**, and the $165mn offered in January, which bankruptcy Judge Rhodes had rejected. **With the agreement, the counterparties have agreed to consent to the City's plan of adjustment. As such, this would allow Detroit to pursue a cramdown of other impaired creditors like the GO bondholders as noted above.** Under the terms of the settlement, if Detroit does not pay the banks the $85mn by October 15, the City will be required to use the proceeds from an expected post-petition financing to do so.

In settling with the City of Detroit the insurers mitigated the tail risk to their broader book of Unlimited Tax General Obligation liabilities. The City's dramatic increase in capital offered to Insured Unlimited Tax GOs was motivated by the dedicated nature of the revenue stream supporting the bonds. As we discussed in our 6/21/2013 report, the language in Detroit OS's on unlimited tax GO bonds is strong, stating the bonds are: "secured by the unlimited tax full faith, credit and resources of the City which will be payable from ad valorem taxes annually levied on all property within the City without limitation as to rate or amount. Despite this, risks to the Unlimited Tax GO sector are partially mitigated in that the agreement lessens the probability of an adverse determination by the Judge regarding recovery value on the securities. **While the Detroit case won't provide broad clarity of the strength of the GO pledge we believe it will likely guide the interpretation of GO debt for Michigan local governments in bankruptcy and will likely influence issuer and investor behavior inside and outside the State of Michigan.**

Aside from capturing 26% of the cash flows, the city benefits in that this agreement motivates other creditors to settle and increases the probability that the Judge will approve the City's broader proposal. A class of claims shall be deemed accepted if a majority of creditors approves the plan and the acceptance represents two-thirds of the total claim. Taking aside the higher effective recovery rate however, **the market may assign a somewhat higher degree of risk to lesser quality Unlimited Tax GO bonds and significantly increase the risk premiums for Limited Tax General Obligation and Pension Obligations COP's.**

Detroit Aid Package Passes House & Senate; Awaits Governor Snyder's signature

The State of Michigan Senate passed a package of nine bills on Tuesday aimed at helping to resolve Detroit's bankruptcy following previous approval by the House. The bill, which now heads to Governor Rick Snyder for approval, is expected to be passed shortly thereafter **authorizing a $195mn cash payment from the state to the city's pension funds as part of a deal to protect the city of Detroit's art collection**. The money is part of a

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court-mediated agreement to raise **$806mn from the state foundations and Detroit's art museums to mitigate benefit cuts to pensioners** and protect city-owned art from sale to pay creditors, with **a provision that the money only goes to pensioners and not to other creditors**. It additionally sets up an oversight board that will govern the post-bankrupt city and provides for a host of other provisions including future labor contracts, retirement benefits, and duties of the chief financial officer. The city continues to stand by its treatment of pensions versus bondholders as described its recovery plan arguing "the marginal harm that will result from each dollar of pension cuts is far greater than the harm that will result from each dollar of cuts imposed on bondholders".

As the Detroit case current stands, all creditors entitled to a Vote for the confirmation of the proposed plan have **until 5pm ET on July 11th, 2014 to submit their ballot** with a hearing to review the comprehensive settlement plan scheduled for July 27th. According to Moody's, City emergency manager Kevyn Orr noted that initial tallies show that city retirees are voting at a 2-to-1 margin to approve the bankruptcy plan that affect their pensions. **If the City's recovery plan is approved in whole at the hearing, creditors who have yet to agree to terms could be subject to the City's proposed terms subject to the Judge's discretion.** . For a full analysis of the confirmation plan and details specific surrounding the necessary votes see our report on 05/16/2014.

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Trading recommendations[1]

- **Sell long 4s, particularly those trading on the cusp of being outside of de minimis, and replace with current 5% coupons. The trade nets a higher book yield, decreases rate exposure, and lessens the overall tax burden.** *(US Fixed Income Markets Weekly, 1/24/14)*

- **Taxable investors should consider tax-exempt, long dated A-rated municipal bonds as bonds in this sector are trading at yields higher than comparable Corporates** *(US Fixed Income Markets Weekly, 10/18/13)*

- **Based on current market levels, investors should be aggressively swapping out of long dated A-rated 4% coupon bonds and into 5% structures** *(US FIMS Weekly, 6/7/13)*

- **Look to the Heartland for credits that showed resiliency through the recession and are currently exhibiting strong growth** *(US FIMS Weekly, 5/10/13)* Spread: State of Utah (+5bps), Salt Lake County, UT (+19bps), Des Moines, IA (+29bps), Cedar Rapids, IA (+28bps), Bismarck, ND (+25bps), Fargo, ND (+28bps), Lincoln, NE (+27bps), Omaha, NE (+17bps)

- **As Michigan's credit improves, issuers that rely on transfers from the State should benefit. Consider select local credits that are highly rated but provide outsized spread, largely as a result of their association with the State and some of its high profile distressed local issuers.** Spread: Grand Rapids (+50), Ann Arbor (+40), Charter Commerce (+40), Warren (+58) *(US FIMS Weekly, 4/19/13)*

- **A stabilizing housing market is supportive of property tax-backed debt.** Consider Honolulu GO (+30), New York City GO (+40), San Francisco GO (+25), and Houston GO (+28) *(US FIMS Weekly, 4/12/13)*

- **IL State GO bonds may be attractive at current spreads, given strong legal protections, a first call on any and all revenues, and the State's broad revenue generating powers.** Spread: +140 *(US FIMS Weekly, 3/15/13)*

- **We recommend low AA and A rated airport bonds that have limited local competition, a diversified revenue base, a sizeable and strong home service area, and solid airline relationships, marked by a track record of low enplanement costs** *(US FIMS Weekly, 2/8/13)*

- **Consider California school district GO CABs for the yield provided, particularly those located in high income areas with solid financial performance** *(US FIMS Weekly, 2/1/13)*

- **Add AMT securities at today's spreads for the additional yield-pick up, assuming that the sector and credit are acceptable to investors in a lower liquidity bucket** *(US FIMS Weekly, 1/11/13)*

- **Overweight the 2020-2024 portion of the curve for total return mandates and 2034-2037 for yield oriented investors** *(US FIMS Weekly, 1/11/13)*

- **2026 A and 2020 BBB bonds provide similar yield to 2042 AAA bonds, but offer much higher total return prospects. We favor 2026 A bonds over 2020 BBB bonds** *(2013 Municipal Outlook)*

- **Buy special tax bonds that have strong fundamentals but trade at wider spreads due to factors unrelated to the quality of the cash flows of the securities.** Spread: Cook County Sales Tax (+62), Chicago Sales Tax (+70), Build Illinois (+80), MetPier (+100) *(US FIMS Weekly, 8/10/12)*

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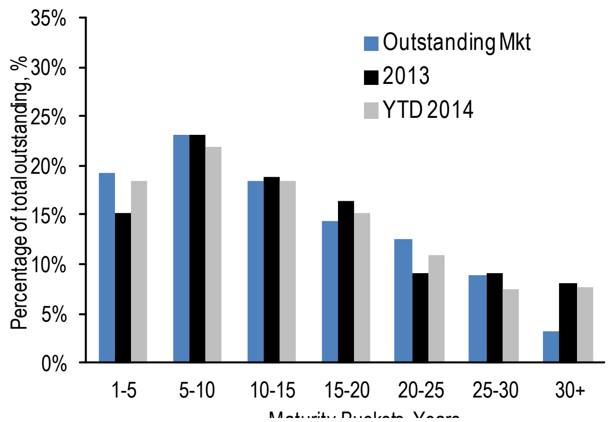
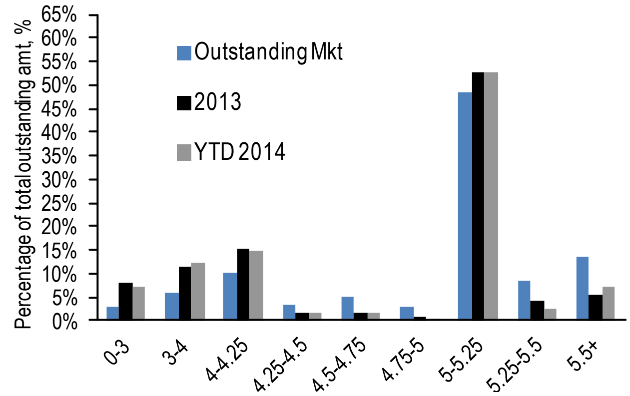
Issuance and Trading Trends

22% of YTD issuance has been the 5-10yr maturity



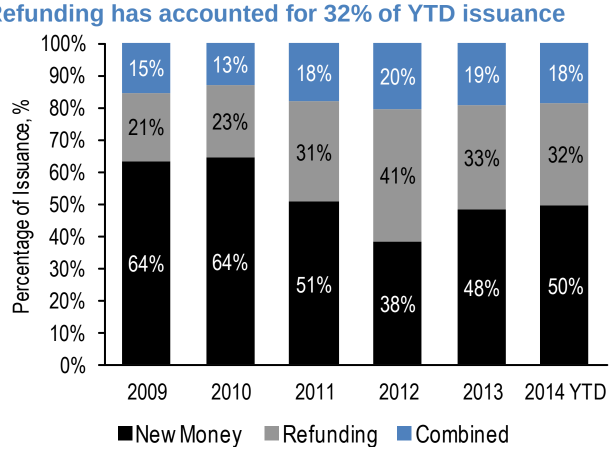
Source: S&P, J.P. Morgan
Note: Long term, fixed coupon, tax-exempt bonds only

53% of YTD issuance has been in 5%-5.25% coupon bonds



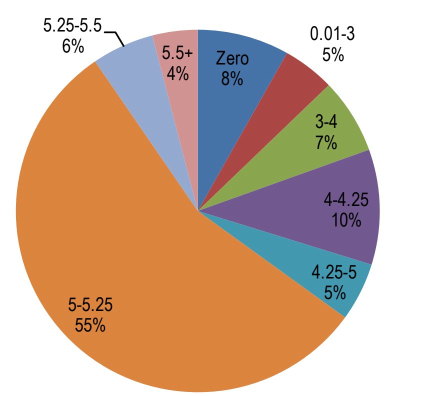
Source: S&P, J.P. Morgan
Note: Long term, fixed coupon, tax-exempt bonds only

Refunding has accounted for 32% of YTD issuance



Source: Thomson SDC, J.P. Morgan
Note: Long term bonds only

Zero coupon bonds have accounted for 8% of YTD trading volume



Source: S&P, J.P. Morgan
Note: Long term, tax-exempt bonds only

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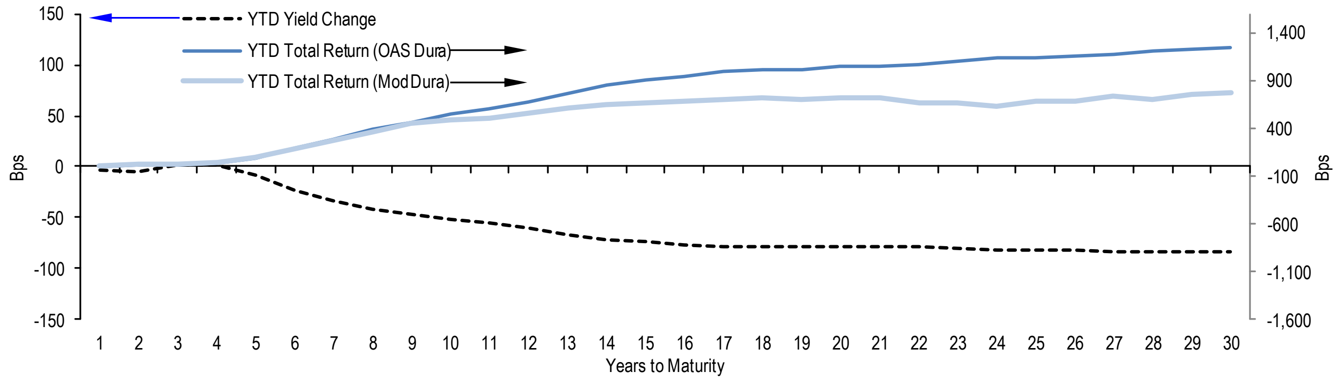
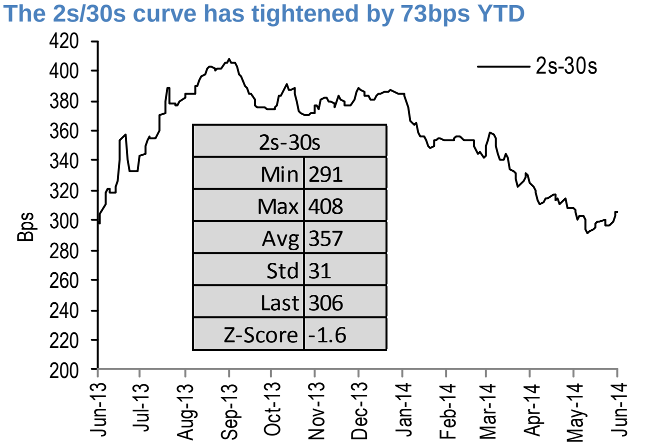
Total return and Curve Spreads

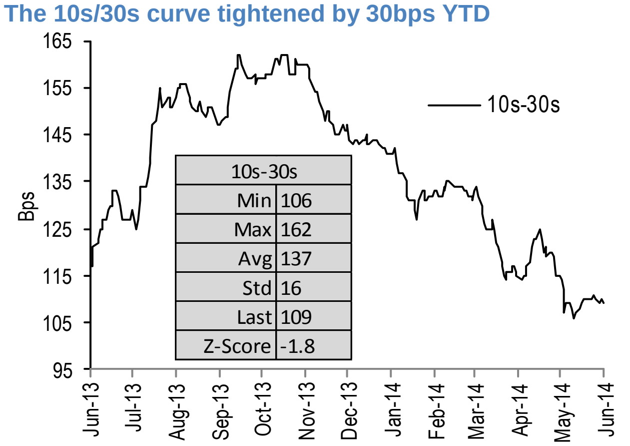
HG municipal yields have declined YTD resulting in positive returns for all spots on the curve



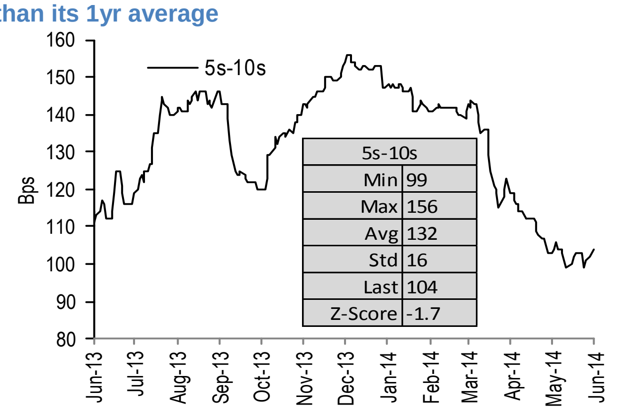
The 2s/30s curve has tightened by 73bps YTD



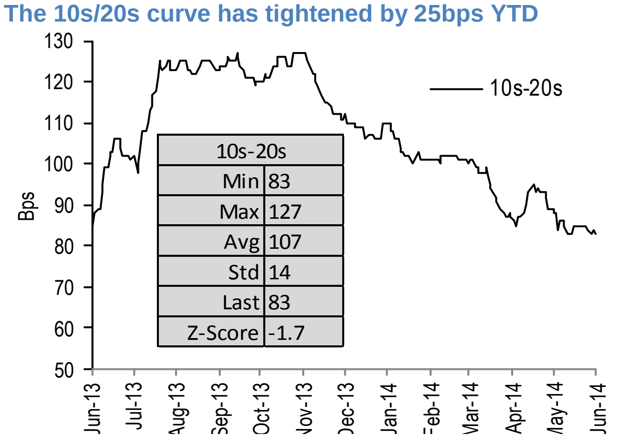
The 10s/30s curve tightened by 30bps YTD



At 104bps, the current 5s/10s curve is 1.7 sigma lower than its 1yr average



The 10s/20s curve has tightened by 25bps YTD



Source: Thomson Reuters, Bloomberg, J.P. Morgan
Note: Yields as of 6/06/2014

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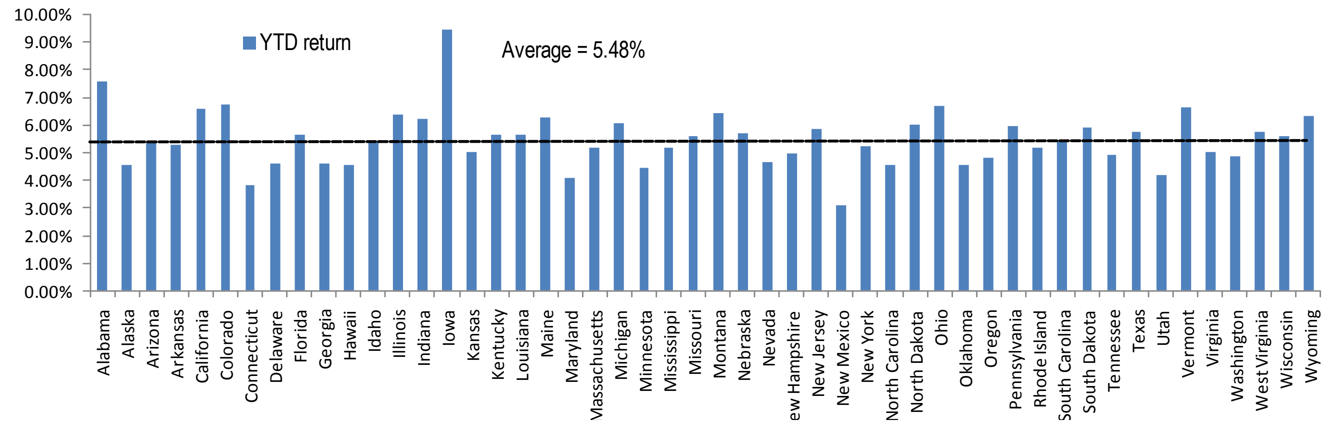
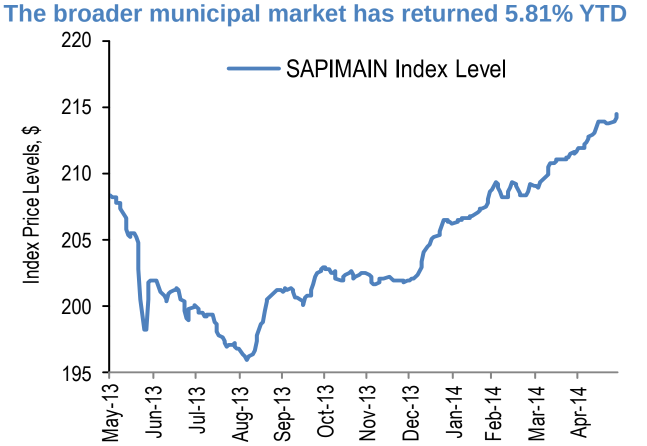
Total return by State and Sector

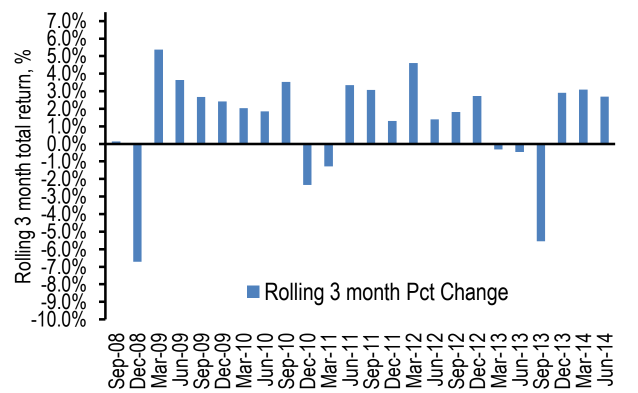
The average duration adjusted YTD total return for S&P municipal bond indices by state is 5.48%



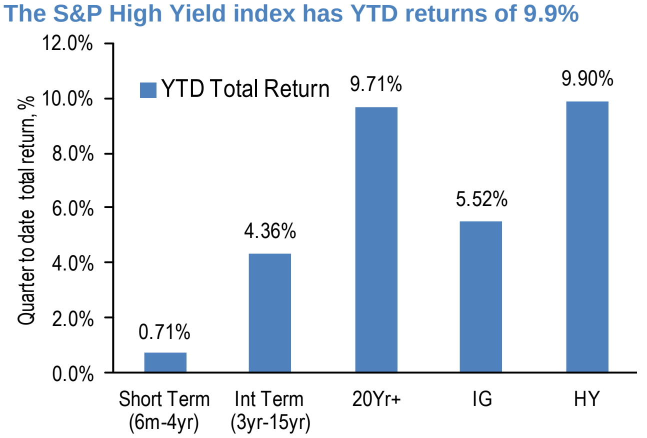
The broader municipal market has returned 5.81% YTD



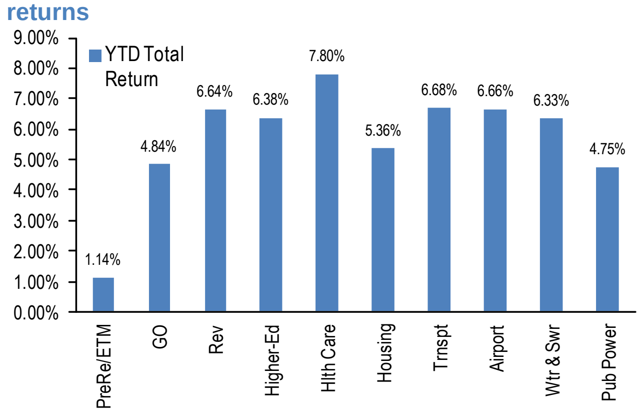
The SAPIMAIN index has returned 2.70% in the three months between 3/06/2014 and 6/6/2014



The S&P High Yield index has YTD returns of 9.9%



The S&P health care sector index shows the best YTD returns



Source: S&P, Bloomberg, J.P. Morgan, as of 6/06/2014
Note: Total return calculated as the percentage change in index levels. S&P Municipal bond total return indices used, please refer to http://us.spindices.com/index-family/fixed-income/municipals

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Compilation of Puerto Rico Research

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- Full year gross and net supply estimates
- Fund flows
- Interest rate forecast
- Next week's supply

Disclosures

Changes to document: Pages 1, 3, and 6 -- Duplicate bullet removed, and 3 instances of duplicate words removed.

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