

2014 Municipal Outlook

Navigating a more difficult terrain

This is a reprint of the Municipal Credit section published in the Global Credit Outlook 2014.

- We project total returns of -145bp in 2014 for the Barclays Municipal Index. Our expectations are driven primarily by rising interest rates; carry on the index; and the expected outperformance of munis relative to Treasuries, especially at the long end. For taxable munis, we expect -175bp of total returns – with 200bp of excess return – for the Barclays Taxable Municipal Index, as we once again expect higher interest rates to counteract modest spread tightening.
- While we expect munis to outperform Treasuries, a lot of challenges remain, and the municipal market could be choppy in the next year. A lot will depend on fund flows and the supply/redemptions dynamic. The latter should be supportive, but a strong rally is not likely without a stabilization of fund flows. We think that it will be difficult for fund flows to stabilize until the Fed starts to taper. The muni market could react adversely in the early stages, but we think that outflows will reverse – similar to the 2005 experience – as valuations likely become attractive and the benefit of tax exemptions increases with rising rates.
- The retail-dominated muni market was prone to headline risk in 2013, and we believe that this will prevail in 2014. Specific areas to watch include creditor negotiations and settlements during the Detroit bankruptcy; Puerto Rico's liquidity and market access; the pension deficit problem in Illinois; and the far-reaching effects of underfunded pension/OPEB liabilities for local municipal credits.
- We expect 2014 issuance to decline 16% y/y, to \$270bn. We believe the most meaningful driver of this potential decline will be less current and advanced refunding activity, which will likely be constrained amid an evolving higher-rate environment. We project a 10% decline y/y in taxable issuance; our projection reflects the relative advantage of issuing in the less regulatory-intensive taxable market, offset by the expected upward drift in rates.
- In the tax-exempt market, we see value in long bonds given the underperformance of longer-duration municipal bonds and a steep muni curve. We expect the muni curve to flatten next year, in line with expectations in the Treasuries market. We also think that the A-rated portion of the index looks attractive at current levels given its underperformance this year, as well as improving municipal credit quality. On a sector basis, we believe the following sectors offer relative value: hospital, IDR/PCR, transportation, and water and sewer. Finally, muni HY looks attractive versus US HY, with the ratio of the former to the latter at 119%, an all-time high.
- On the taxable side, we see value in intermediate taxable munis and the power sector within long taxables. In our view, the relationship between intermediate taxable munis and intermediate credit appears somewhat dislocated currently, with the differential between the two indices well off May 2012 tights. We believe that spreads in power bonds look attractive versus the utilities sector on the corporate side and that the former still has room to run.

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2014 performance outlook

We project total returns of -145bp in 2014 for the Barclays Municipal Index. Our expectations are driven by three major factors: 1) Barclays 2014 rates forecast; 2) likely carry on the index; and 3) expected outperformance of munis relative to Treasuries, especially at the long end. The largest driver of returns next year is the projected rise in interest rates. Barclays' rates strategists project 10y and 30y yields to increase to 3.50% and 4.40% by year-end 2014, respectively. We expect this dynamic to drag down total returns by approximately 600bp, as the average duration of the Muni Index is relatively long at 8.4. Yield carry is the second-largest component; we forecast a carry of approximately 310bp in 2014 based on current index yields. The final component is our belief that long munis will outperform Treasuries, mitigating some of the effects of expected higher interest rates. Specifically, we expect muni ratios at the long end to compress to the 100% area – from 108% – providing approximately 145bp of total returns. Altogether, 2014 will likely be another down year for munis, given interest rate expectations, but they should outperform Treasuries in this environment.

As we contemplate the taper and rising interest rates, as well as continued municipal mutual fund outflows – approximately \$60bn have left muni funds, or 11% of assets, since March 2013 – it is hard to see the light at the end of the tunnel. However, some positive signs, on a relative basis, have already emerged, and history suggests that munis will typically outperform Treasuries in rising rate environments as well as in periods of Fed tightening. Looking at the last 20y+, we find that, with very few exceptions, the muni curve tends to flatten and muni ratios tend to compress when the Fed tightens or rates rise (Figure 1). Here, the exceptions were the Fed tightening in June 1999-May 2000 and the rising interest rates environment in October 2010-February 2011. We would argue that those are unique time periods. In 1999-2000, economic growth was robust and equities were soaring to record highs. Many investors pulled money out of bond funds and other sources and funnelled them into equities, as the PE ratio on the S&P 500 index reached a frothy 30x; muni fund outflows reached close to 10%. While in late 2010 to early 2011, the municipal market was under duress due to (what turned out to be unwarranted) concerns about defaults and the downgrade of the tobacco sector during a lull in QE. In this instance, outflows were also significant, totalling slightly over 10%.

FIGURE 1

Muni curve and ratio changes during Fed tightening and rising interest rate environments

Date	Treasury 10s30s curve (bp)	MMD 10s30s curve (bp)	10y muni ratio (%)	30y muni ratio (%)
Fed tightening				
Feb 94 - Feb 95	-37	-15	-3	-2
Jun 99 - May 00	-50	14	0	9
Jun 04 - Jun 06	-63	-57	-5	-5
Rising rate environments				
Sep 93 - Nov 94	-54	-5	-6	-2
Jan 96 - Jun 96	-25	-10	-5	-4
Oct 98 - Jan 00	-63	-5	-16	-10
Nov 01 - Apr 02	-20	-26	-7	-10
Jun 03 - Sep 03	-33	-31	-5	-6
Mar 04 - Jun 04	-29	-10	-3	-1
Jun 05 - Jun 06	-26	-35	-7	-12
Mar 08 - Jun 08	-43	-37	-22	-17
Dec 08 - Jun 09	32	-9	-85	-96
Nov 09 - Apr 10	-14	-44	-9	-16
Oct 10 - Feb 11	-32	17	-6	5
Sep 11 - Oct 11	-2	-13	-12	-13
Jan 12 - Mar 12	-3	-28	3	-8
Jul 12 - Sep 12	15	-5	-12	-14

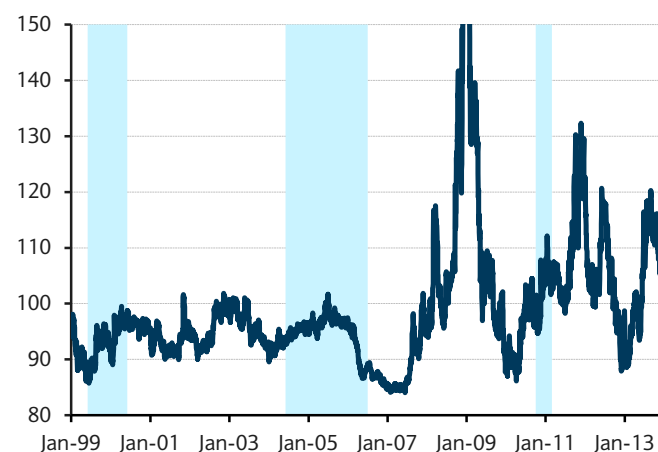
Source: Bloomberg, Barclays Research

While there are a lot of similarities between those two periods and today – including a strong equities market, concerns about certain municipal credits, and significant outflows – there are some key differentiating factors. Most importantly, we believe the supply/redemptions technical that has helped the market in the past few months will once again be supportive next year. We estimate that redemptions will outpace supply by \$30-40bn this year – which has helped to alleviate the effect of outflows. Also important, munis, especially long munis, are relatively attractive; the muni curve remains steep, and 30y muni ratios are still above 100%. The slope of the 10s30s part of the curve is around 150bp compared with just 100bp at the beginning of 2013 (Figure 2). In contrast, the 10s30s curve at the beginning of 1999-2000 was just 50bp, and it was near the tight of the year when the Fed began raising rates. When rates began rising in late 2010, the 10s30s curve was steeper, at 137bp, and continued to steepen as idiosyncratic issues drove a muni sell-off. Further, the 30y muni ratio – at 108% – offers considerable value relative to Treasuries (Figure 3). By contrast, the 30y muni ratio was around 95% in late-2010 and mid-1999. With respect to concerns about investors withdrawing funds from munis to invest in equities, we think 2008 is fresh enough in investors’ mind that we will not see the re-allocation witnessed around the turn of the century. During June 1999-May 2000, fund flows into equities totalled \$220bn, or 7% of assets. In comparison, fund flows into equities have totalled approximately \$170bn since May 2013, or around 2.5% of assets.

We think that a comparison with 2004-06 is more interesting, and perhaps more appropriate. There were many similarities between the two periods including: 1) both economies were undergoing a stimulus-driven recovery, although the early 2000s recovery was more robust; 2) both markets were expecting/experiencing Fed tightening; 3) munis were attractive, particularly long munis; and 4) muni mutual funds faced significant outflows, but flows reversed in the middle of the Fed tightening during the mid-2000s. Interestingly, the outcome of the 2004-06 bout of Fed tightening was positive for the muni market from a relative perspective. In our view, the current municipal market could have a similar experience. We think that the biggest takeaway is that fund outflows could reverse even as the Fed is tightening, if munis are attractive. From April 2004 to August 2004, muni fund outflows totalled \$12bn, or 4% of assets, as the Fed started raising rates. However, fund flows started returning as munis became more attractive, even as the Fed continued to raise rates through to June 2006.

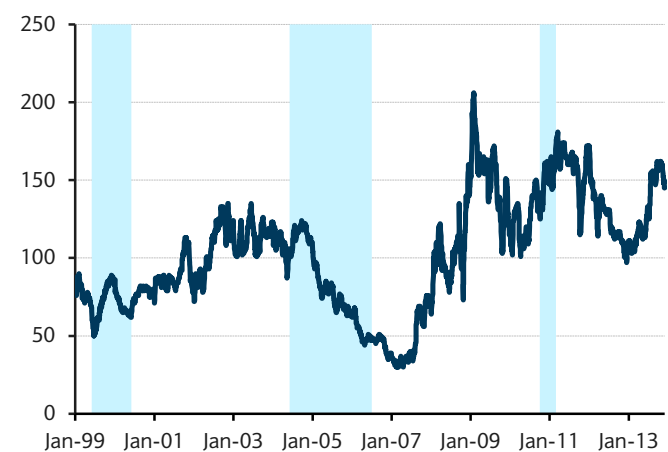
We think that the supply/demand dynamic will be supportive for the market, but a strong rally is not likely without a stabilization of fund flows. To that end, we think that clarity on

FIGURE 2
30y tax-exempt muni ratios (%)



Source: Barclays Research

FIGURE 3
10s30s AAA-rated tax-exempt GO yield curve slope (bp)



Source: Barclays Research

Fed policy would be a major step. Currently, the market is itching to react to any data that could point to a tapering of Fed asset purchases. Thus, we think that it will be difficult for fund flows to stabilize until after the Fed starts paring back QE. In the early stages of tapering, we think that the muni market will react adversely, similar to the experience when the Fed tightened in June 2004. However, as valuations become attractive and the benefits of tax exemptions increase with rising rates, fund flows will likely return to the muni market, setting up a scenario where munis can outperform. In such a case, long muni ratios could reasonably compress to the 100% area, if not even further. In our view, 10y and 5y muni ratios have limited room to compress given current levels – 97% and 85%, respectively. However, we acknowledge that these ratios could compress as shorter dated muni yields generally do not rise as much as Treasury yields in a rising rate environment (but we offer the caveat that in the current environment, short muni yields may rise more in line with short Treasury yields as the muni curve is steep).

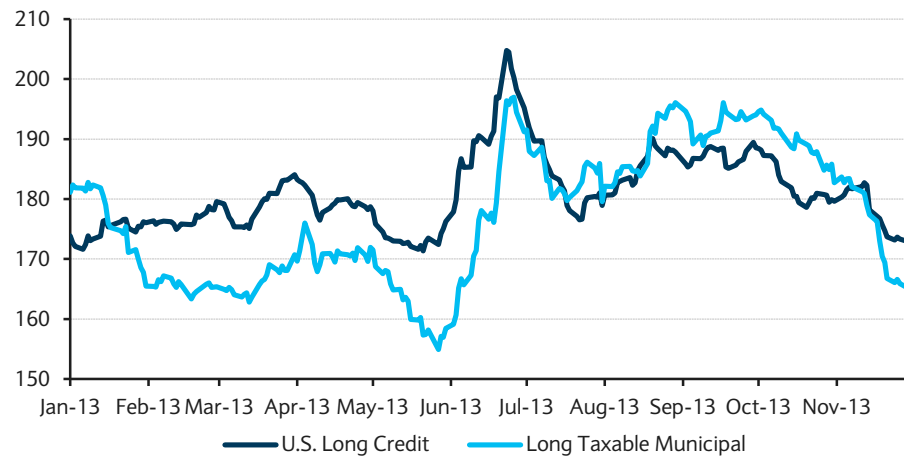
Our returns projections face downside and upside risks. One of the major risks is investors' reaction to the Fed tapering asset purchases. In recent efforts, the Fed has strongly argued that the end of QE is not tantamount to tightening policy. If investors accept this argument, we could see positive fund flows return sooner than anticipated, providing a lift to the muni market. The market will then have its sights set on rate hikes, which many participants expect in 2015, although a dovish Fed under chairman nominee Janet Yellen should ease concerns of a hasty tightening. In our opinion, it is unlikely that investors will take this view, especially as the financial markets remain sensitive to new economic data points and Fed releases. On the downside, there is a possibility that fund flows do not recover as quickly as we anticipate, if investors quickly focus their attention on a potential rate hike in 2015 after the Fed ends QE. We are mindful of this, but we believe that fund flows will return if munis remain attractive even if Fed tightening is on the way, similar to the environment in 2005.

Higher-than-expected supply and headline risk could also blow our total return forecast off course. In 2014, we expect issuance to decline 16% y/y to \$270bn. In our view, higher rates will severely constrain current and advance refunding activities, while new money supply will be stable y/y. Although the likelihood is low, supply could exceed our expectations if the market experiences a pull-forward of new money issuance in the face of rising rates and concerns about the potential for tax reform. In addition to tax reform, there are several key issues that can readily grab headlines and shake investor confidence, which is something that is both hard to predict and to discount. Specific areas to watch include: creditor negotiations and settlements during the Detroit bankruptcy; Puerto Rico's liquidity and market access; the pension deficit problem in Illinois; and the far-reaching effects of underfunded pension/OPEB liabilities for local municipal credits.

Taxable returns

For 2014, we project -175bp of total returns for the Barclays Taxable Municipal Index as we expect higher interest rates to drag down returns. Year-to-date, the taxable index has generated excess returns of 240bp, which is solid in comparison with the U.S. Credit Index (136bp). For next year, we forecast excess returns of approximately 200bp, driven mostly by 175bp of spread carry and 0-5bp of spread tightening, in line with the performance expectations of U.S. investment grade credit. With the long portion of the taxable muni index now trading 8bp through long U.S. Credit, compared with as much as 10bp wide at the beginning of the year, we see limited room for the taxable index to rally on a relative basis (Figure 4). Any outperformance will likely be driven by intermediate taxables, which are considerably wider than their corporate counterparts. However, intermediate bonds are a small and illiquid portion of the taxable index, and names such as Puerto Rico and Illinois are disproportionately represented.

FIGURE 4
Long taxable municipal versus US long credit OAS (bp)



Source: Barclays Research

Key municipal issues

Tax reform

The spectre of tax reform has faded from investor confidence for much of 2013. Prospects for tax reform have been discounted, as market attention was focused on other events in Washington – specifically, the government shutdown in October. However, both Houses of Congress are still working on tax reform packages; which may include measures to reduce or eliminate the tax exemption of interest on municipal bonds. In our view, tax reform that could affect the municipal exemption will be proposed during 2014, although actual tax reform legislation is unlikely.

A large and influential group of legislators from both parties agree that a comprehensive overhaul of the overly complicated tax code is needed. Currently, the fundamental challenge facing comprehensive tax reform is whether the parties can find enough common ground to agree on significant reform. Both parties approach the subject with the intent of reducing the economic drag from our inefficient tax code. However, there is extreme disagreement on whether tax reform should be revenue neutral or, if it should raise additional revenues to fund government programs. Ultimately, these irreconcilable objectives, coupled with the increasing partisan mistrust, suggest significant uncertainty around whether tax reform of any substance can be achieved by Congress.

Headline risk

2013 has shown that headline risk is a critical factor in a retail-dominated asset class such as municipals. All fixed income markets performed poorly after the tapering discussion began in May. However, for most fixed income markets, the volatility settled fairly soon after the tapering discussion began. The sole outlier was the municipal market, as concerns about Detroit's proposed debt restructuring led to concerns regarding its bankruptcy filing. Post-Detroit's bankruptcy filing, the attention turned to Chicago and soon thereafter, Puerto Rico. The latter has been besieged by a relentless storm of negative media articles since late August. The net effect of this media attention on the municipal bond market has been the longest sustained period of mutual fund outflows on record, resulting in the largest dollar amount of outflows ever. As we write this Outlook, net negative flows for 2013 are \$53bn, including gross outflows of \$61bn since outflows began in March.

We believe headline risk in 2014 could come from the following areas:

- Bankruptcies;
- Puerto Rico;
- Illinois; and
- Pensions and OPEB

Bankruptcies – Jefferson County, Stockton, and Detroit

We expect little headline risk to arise from the Jefferson County and Stockton bankruptcies, as the former recently had its plan of adjustment confirmed and Stockton is moving toward plan confirmation. In Stockton's case, there is a fairly small risk that the plan may not be confirmed. The city has settled with all of its creditors except one. The non-settling creditor could argue that the treatment of creditors under the plan is not equitable, while the city could argue that settlements with each creditor group were based on the value of the underlying security (for bond deals) and therefore is allowable. Investors expect that the judge will find that the plan does not unfairly discriminate.

The Detroit bankruptcy will likely be in the headlines for much of 2014. On December 3, 2013, the court ruled that Detroit was deemed eligible for Chapter 9 bankruptcy protection. Following this ruling, we would expect the case to move towards negotiations on a plan of adjustment. During this period, various issues may arise, including, for example the valuation and utility of municipal assets such as the art collection. Ultimately, we would expect the city to reach settlements with its creditors as Stockton did. There has never been a cramdown of creditors in a Chapter 9 – a plan such as the original restructuring plan prepared by the city has numerous problems that may hinder the path to plan confirmation, unless there are creditor settlements (similar to what occurred with Stockton). In the Stockton case, confirmation was made more likely by the voter approval of a tax hike, which extended some share of the burden to the residents combined; all creditors settled and there was only one holdout. In general, a confirmation outcome is more likely with only one holdout rather than multiple holdouts claiming disparate treatment. This could provide Detroit with the incentive to reach settlement with all of its creditors. This will be no simple task, given the public comments of many of the creditor groups such as the unions.

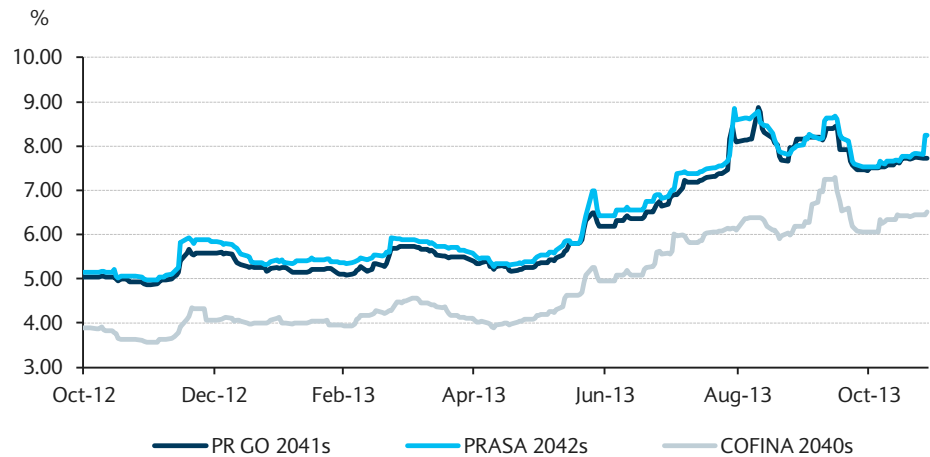
Puerto Rico

Puerto Rico dominated headlines for most of 2013, starting in January, when the market became aware that the commonwealth had a widening budget deficit. We believe that the commonwealth will likely retain a similar level of market attention during 2014. Specifically, we believe all eyes will be on the commonwealth in early January and February, as market participants look to interim revenue measures as a guide to the status of the 2014 budget. There will also be market interest regarding the timing of commonwealth bond issues. As of early December, it appears that the anticipated \$0.5-1.2bn in deficit financing will not occur before the end of 2013. While the commonwealth has stated that it can wait out market conditions and even defer borrowing until next fiscal year (given its sources of liquidity), market participants question this assertion.

The various ratings of the commonwealth entities border on non-investment grade, with two negative outlooks and one watch negative. Thus, downgrade risk to non-investment grade is fairly high. Fitch has recently warned that lack of market access could have negative rating consequences. The rating agency has signaled that it is closest to downgrading the commonwealth, while S&P has evidenced a constructive two-year outlook and rating philosophy. Market participants will be intently watching for rating action.

The question of market access for Puerto Rico is interesting. Conversations with investors have led us to believe that the commonwealth does have market access and could sell a sizable amount of debt. The major issue for the commonwealth is the interest cost of such debt currently. This cost would be at levels reflective of a liquidity squeeze in the municipal market, likely exacerbated by concerns over the fundamental credit position of Puerto Rico. It appears as if the commonwealth would rather wait out the negative fund flows in the market and potentially issue bonds at more favorable rates when flows turn positive. Figure 5 shows yield levels for benchmark Puerto Rico bonds.

FIGURE 5
Select Puerto Rico bonds, YTW (%)



Source: Barclays Research

The recent Jefferson County bond deal is an example of one of the risks commonly mentioned in the Puerto Rico situation: the question of market access if the commonwealth is downgraded to a non-investment grade level. Although Jefferson County carried one investment grade rating, investors looked past that rating and the transaction sold at prices indicative of municipal high yield or non-investment grade levels. This transaction was the first time a municipal government has sold debt while in bankruptcy and is the first large, if not only, debt issue sold for a non-investment grade municipality. Judging by this bond sale, we believe that market access does not seem to be an issue of rating alone, but will hinge on various factors.

Illinois

Illinois’ pension deficit and general fund payables problems have led to much concern over the state. Pension issues continue to fester as political leaders propose fixes that either run short of what is needed or do not reach requisite political consensus. Moody’s has indicated that significant further deterioration in the unfunded liability could cause ratings to go down; in June, S&P stated that lack of meaningful pension reform and further budgetary stress could result in ratings pressure. Legislative leaders from each party recently announced that a pension reform plan has been reached. As of early December, the legislature had passed the bill, and the governor promised to sign, although there still appears to be significant organized opposition. Illinois is currently the lowest-rated state and, in our view, risk for a downgrade remains if the pension reform plan is found to be deficient or is struck down in court.

Pensions and OPEB

The Detroit bankruptcy filing has shined the spotlight on retiree (OPEB) healthcare obligations, highlighting these as a fiscal issue equally as important as the much-discussed government pension problem. The most significant issue with the healthcare liability is that

it is predominantly unfunded, with the entire annual obligation generally met on a pay-as-you-go (Paygo) basis. For the most part, these liabilities are long-term issues. However, the rapid increase in the recognition of the liability is causing a crowding out issue in government budgets. In some cases, the annual expense is doubling in as little as four years. We are concerned that the growing annual expenditures for these two items may cause fiscal problems in isolated local credits throughout the country.

Municipal credit quality

Away from the examples addressed above, overall municipal credit quality is actually improving due to modestly increasing revenues. Economic growth, even if slow, is generally a positive for municipal revenues, albeit with a lag. According to the Nelson A. Rockefeller Institute of Government, total state tax collections have been growing for over three years, although levels have not reached the pre-recession peaks of 2008. Revenue increases have also been recorded at the local level, though the increases remain generally weak due to the slow rebound in real estate-related tax revenue.

Going forward, the largest issue regarding municipal credit quality will be the increasing payments required to meet retiree obligations: pensions and health care. From a ratings standpoint, the trend of downgrades outnumbering upgrades continues, as local governments continue to adjust to declining state distributions. Interestingly, municipal defaults are occurring at the slowest pace since 2008, according to Municipal Market Advisors. However, idiosyncratic risk remains, as shown by the Detroit bankruptcy filing, and the numerous media headlines about Puerto Rico.

2014 supply and redemptions forecasts

We forecast \$270bn of gross municipal supply in 2014, including \$240bn in tax-exempt issuance and \$30bn in taxable supply. We project \$302bn of redemptions for the year, with roughly \$281bn in tax-exempt and \$21bn in taxable redemptions. This translates into a net supply forecast of about -\$32bn in 2014, including -\$41bn of tax-exempt and \$9bn in taxable net supply (Figure 6).

FIGURE 6

Barclays 2014 supply and redemption forecasts

	(\$bn)
Tax-exempt supply	240
Taxable supply	<u>30</u>
Gross supply	270
Tax-exempt redemptions	281
Taxable redemptions	<u>21</u>
Total redemptions	302
Net supply	-32

Source: Barclays Research

The taxable supply numbers above refer only to debt issued with a municipal CUSIP. Muni deals sold with a corporate CUSIP are not included in the regular supply forecast; they are discussed separately below. We make the distinction as traditional muni supply databases (i.e., SDC) do not count deals sold with a corporate CUSIP in aggregate muni volumes.

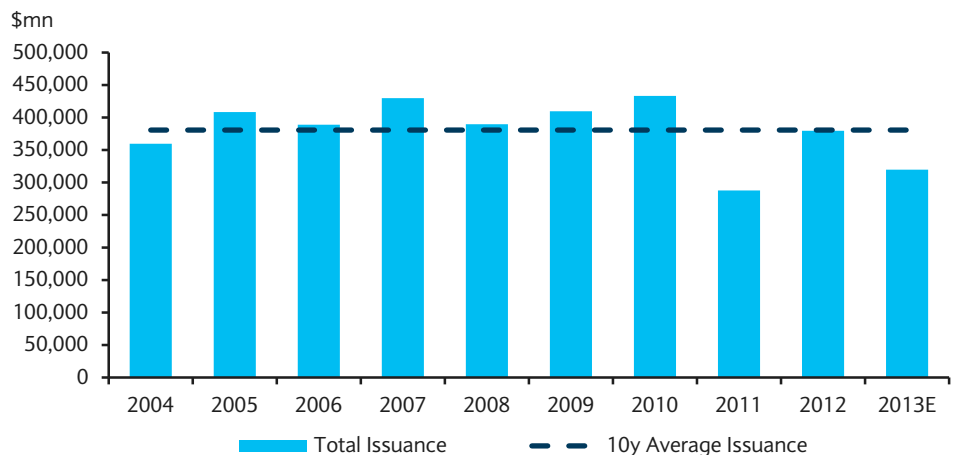
Gross supply

Post-Build America Bond (BAB) era, annual muni issuance has been either in line with or below the 10-year mean of \$376bn (Figure 7). Given the likely upward drift in interest rates next year, we expect 2014 supply to be down 16% y/y on the following considerations.

- **Current refundings:** A higher interest rate environment would be a significant overhang on current refunding activity. We saw evidence of this in 2013, when 30y Treasuries sold off more than 100bp from May-August and current refundings declined 5-15% in 2H versus 1H. In the prior period, when 30y Treasuries backed up more than 100bp (October 2010 to February 2011), current refundings declined about 15% in the four months afterwards. In 2014, we expect current refunding activity to remain pressured, particularly as Treasury yields likely continue to rise.
- **Advanced refundings:** In 2014, we believe advance refunding activity will decline meaningfully y/y. With 30y AAA muni yields currently above 4% and likely to drift higher next year, refunding economics for deals issued in recent years are less attractive. Additionally, we believe that advance refunding transactions may be constrained by negative arbitrage effects. In general, as part of an advance refunding transaction, the differential between muni yields and Treasury yields affects the ability to structure an efficient escrow. A higher differential could result in a very inefficiently structured escrow, which may lead to negative arbitrage and overwhelm transactional savings. Long muni bonds are currently spread more than 100bp over Treasuries, while they were trading just 30bp behind Treasuries at this time last year. This higher differential y/y could increase the risk of negative arbitrage in 2014 and limit pre-refundings.
- **New money:** We believe that 2014 new money supply will be unchanged y/y. Our belief reflects the fact that various major issuers having been fairly quiet on the issuance front for a while, counterbalanced by a higher interest rate environment.
- **Tax exemption:** Concerns about the status of tax exemption and the ultimate outcome of tax reform may result in a pull-forward of issuance, although we believe this effect would be minor.

We caveat that should rates sell off more than expected, issuance would decline meaningfully versus our projections, particularly for current and advance refundings.

FIGURE 7
Annual muni issuance (2004-13E) versus average



Source: Bond Buyer, Barclays Research

Taxable supply

For taxable issuance sold with a muni ticker, we expect about \$30bn of supply in 2014. Year-to-date in 2013, taxable issuance totalled about \$32bn, with roughly \$5bn of it eligible for the US Taxable Muni Index and, by extension, the larger US Credit Index. In 2014, we expect index-eligible taxable issuance of \$4-5bn. This forecast reflects the advantage of issuing in the less regulatory-intensive taxable market compared with the

tax-exempt bonds and issuers' awareness of the benefits of issuing in taxable muni index eligible size (CUSIP size of at least \$250mn), and could be partly offset by any overhang from a higher rate environment.

For taxable issuance sold with a corporate ticker, we expect roughly \$2-3bn of US Credit index eligible issuance in the higher education sector and \$3-4bn of supply in not-for-profit hospitals. As a reminder, muni issuance with a corporate ticker would not be included in the taxable muni index, although it could be eligible for the broader US Credit Index, assuming it satisfies index rules.

Reinvestment capital

We expect redemptions (which we define as redemptions from current refundings, advanced refundings, and maturing bonds) to total \$302bn in 2014. As always, we expect estimates for redemptions from advanced refundings (\$69bn) and maturing bonds (\$152bn) to change only slightly over the year, as these are generally set through prior market activity. Redemptions from current refunding activity should result in the greatest variation from our forecast (Figure 8).

FIGURE 8
2014E redemptions

(\$mn)	Current refundings	Advance refundings	Maturing bonds	Total
Jan	5,942	4,920	10,783	21,645
Feb	4,568	6,848	11,283	22,699
Mar	5,646	4,152	9,091	18,889
Apr	6,764	4,381	8,797	19,942
May	7,366	5,361	10,118	22,845
June	8,465	8,020	14,858	31,342
July	8,882	8,859	19,567	37,307
Aug	6,789	9,336	20,443	36,567
Sep	6,275	2,665	9,797	18,737
Oct	6,438	4,514	11,181	22,133
Nov	6,593	3,794	10,679	21,066
Dec	6,497	6,408	15,671	28,576
Total estimated redemptions	80,224	69,258	152,267	301,749
Tax exempt	75,009	68,018	138,035	281,062
Taxable	5,215	1,240	14,232	20,687

Source: IDC, Barclays Research

For current refundings, we expect 2014 levels to decrease from the \$110bn+ this year. Our forecast is driven by issuance levels from 10 years ago, given the 10y call features typical of many muni bonds. Given that 2004 supply declined 6% from 2003 levels and the higher interest rate environment, we expect redemptions from current refundings to total \$80bn in 2014.

Overall, we expect tax-exempt redemptions to account for about 90% of redemptions in the coming year, in line with post-BAB norms.

Coupon distributions

We expect coupon distributions to total well over \$170bn in 2014, bringing total potential reinvestment proceeds to as much as \$475bn. Not all coupon payments are reinvested by holders, however. More than 70% of demand for the muni debt comes from retail (either household or mutual funds, Figure 9); a major portion of retail includes buyers (such as

retirees) who spend rather than automatically reinvest all coupon distributions. Nonetheless, even though not entirely reinvested, coupon payments will be another driver of negative net supply in 2014.

FIGURE 9
Share of muni bond holdings, %

Category	Percentage of total			
	2013	2012	2011	2010
Individuals/households	44.3	44.6	48.6	49.7
Mutual funds ¹	28.2	28.6	26.6	26.5
Banks ²	11.1	10.6	8.9	7.9
Insurance ³	12.4	12.4	12.2	12.2
Other ⁴	4.0	3.9	3.7	3.7

Note: Numbers in this figure may not add up exactly to 100% due to rounding error. (1) Includes mutual funds, money market funds, close-end funds, and exchange traded funds. (2) Includes commercial banks, savings institutions, and brokers and dealers. (3) Includes property-casualty and life insurance companies. (4) Includes nonfinancial corporate business, nonfinancial noncorporate business, state and local governments and retirement funds, government-sponsored enterprises, and foreign holders. Source: Federal Reserve Flow of Funds, SIFMA, Barclays Research

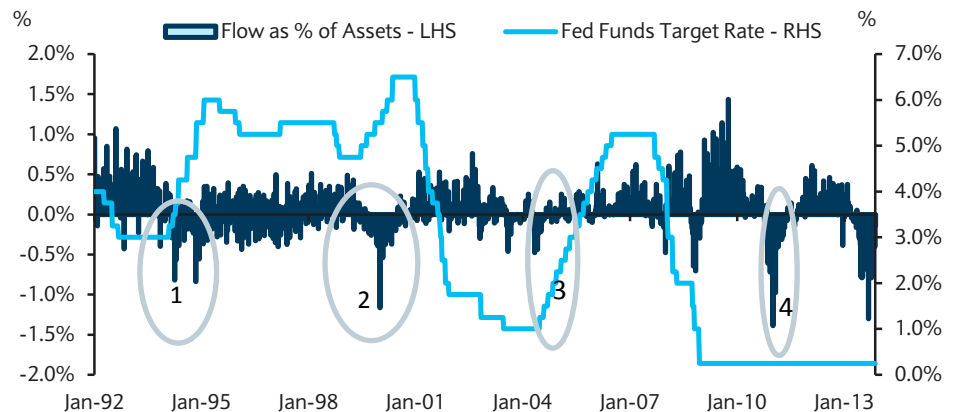
Demand

Fund flows

As the muni market primarily consists of retail holders, mutual fund flows are crucial to the overall 2014 demand outlook. In 2013, fund flows were a large net negative (roughly - \$53bn year-to-date). Inflows in the early part of the year turned to outflows following fears of Fed tapering, exacerbated by idiosyncratic events in the muni market such as the Detroit bankruptcy. As we have discussed above, we think that it will be difficult for fund flows to stabilize until after the Fed begins tapering asset purchases. In the early stages, the muni market will likely react adversely, similar to periods when the Fed hiked interest rates. However, we believe that outflows can reverse even in the face of additional tightening as long as munis are attractive.

Figure 10 shows muni fund flows from 1992-present. The circles represent prior periods when rates sold off significantly and funds experienced meaningful outflows. Circles 1-3 (pre-crisis) were accompanied immediately by sustained hikes in the fed funds target rate; circle 4 (post-crisis) was accompanied by idiosyncratic events in the muni market, (i.e., media headline predictions of a high volume of muni defaults and the downgrade of tobacco credits to high yield in 2011). We have previously argued that a potential tapering of Fed asset purchases is akin to the pre-crisis rate hike “shocks” in circles 1-3. Based on the limited historical data, during the pre-crisis period, we see that fund outflows mostly ended at or before the end of Fed rate hikes. Notably, fund outflows managed to reverse in 2005 in the middle of the mid-2000s Fed tightening. In our view, this historical trend is encouraging for flows in 2014.

FIGURE 10
Muni mutual fund flows versus 30y AAA tax-exempt yields



Source: Lipper, Barclays Research

Banks

Two rules under Basel III are of note, although we do not expect them to meaningfully affect bank demand for munis in the near term. Under one rule, the largest banks must account for any price movements in investments held in their available-for-sale (AFS) portfolios; in a rising rate environment, banks would have to account for price declines in AFS holdings, thereby reducing their reported regulatory capital levels. Under a second rule, revenue debt would maintain at its risk-weight of 50% and GOs would retain a weight of 20%; banks would continue to hold 2.5x as much capital against revenue debt versus GOs, despite arguments from industry participants (including SIFMA) for more equal treatment of the two. These rules are effective from January 1, 2014, for the largest banks, with other banking organizations required to comply a year later.

In our view, these rules will likely not result in meaningful change in the pace of bank buying of muni assets. The first rule applies to all securities, and not just munis; to the extent that banks need to buffer against losses, they may choose to move to higher quality securities, shorten duration, or raise more capital. On the second rule, even though revenue bonds continue to have a higher risk weighting than GOs, munis as a whole continue to have a low risk weighting relative to other securities.

Another issue is the recent Fed proposal for liquidity requirements at affected banks. Under the proposal, regulators have designated high quality liquid assets (HQLA) that can be used to satisfy liquidity coverage ratios; however, munis would not qualify as HQLA. Affected institutions would be phased in to the requirement and would be expected to maintain an LCR of 80% as of January 1, 2015, 90%, as of January 1, 2016, and 100% as of January 1, 2017. It appears that many banking institutions already do not classify munis as "liquid," and as such, the negative effects of this proposal on the muni market may be muted at best.

Insurance

As a percentage of total amount outstanding in the muni market, insurance holdings of muni bonds have remained stable at approximately 12% over the past eight years. Within the insurance category, P&C holdings of munis are 2.5x that of life insurance companies. We attribute this largely to the relative disincentive of life insurers (compared with P&C insurers) to invest in tax-exempt instruments, based on proration provisions and rules from the federal tax code. However, in recent months, we believe there have been increased instances of life insurance companies looking towards the muni asset class for asset-liability matching purposes, owing to the attractive relative value in munis at present. Overall, we do not expect insurers' share of total muni holdings to change meaningfully in 2014.

Positioning within munis

Tax-exempt

Value in long bonds

Amid the summer sell-off in the municipal market, investors often shunned bonds with longer maturities, fearing higher interest rates. As a result, the muni curve steepened considerably in 2H13 (Figures 11 and 12). As we have discussed above, we believe that the curve will flatten next year, making longer bonds relatively more attractive. Barclays U.S. rates strategists are projecting a modest bear flattening in the Treasury curve. They expect 5y Treasury yields to reach 2.50% in 2014, up around 110bp from current levels. The projected rate rise is more moderate at other points of the curve; 10y and 30y yields are expected to reach 3.50% and 4.40%, up around 75bp and 60bp, respectively. For more details, see *Global Rates Outlook 2014: Grinding Higher*, November 21, 2013. The muni curve tends to flatten along with Treasuries in rising rate environments. Although the flattening in munis is often more modest, we think the opposite could happen for a couple of reasons: 1) the long part of the market has underperformed materially with longer muni ratios above 100%; and 2) the muni curve is historically steep, offering more room for the curve to flatten. The long-end has started to perform better as the slope of the 10s30s curve has compressed 15bp to 145bp. However, the main driver is the underperformance of the 10y, as the 5s10s curve continues to steepen. We would be nervous about adding exposure at the front end of the curve given that the relationship between 5y munis and 5y Treasuries is relatively tight. In addition, Barclays' rates strategists believe that the 5-10y portion of the curve is likely the most sensitive to changes in Fed policy.

Value in A-rated bonds

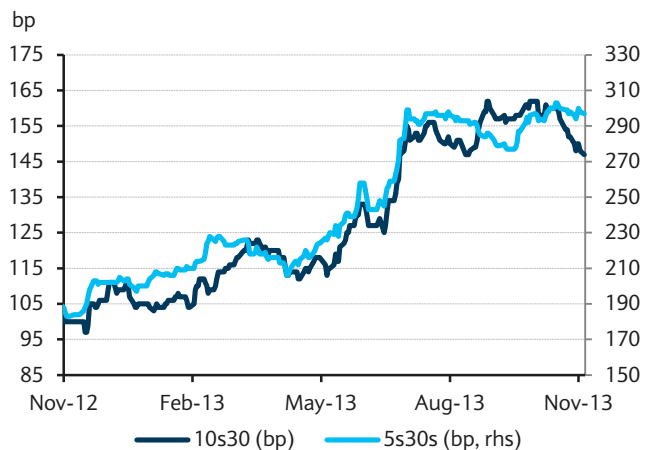
We think that there is value in the lower-quality portions of the Barclays Municipal Index – particularly in the A-rated portion – as AAs have outperformed. As of late November, the differential between the AA-rated and AAA-rated parts of the index was 53bp, up just 14bp from the post-crisis low reached earlier in 2013. By contrast, the A-rated part of the index has measurably underperformed, especially in the past few months (Figure 13). The A-AA differential expanded ~30bp to 86bp; excluding Puerto Rico-related credits, which had a modest effect, the differential increased ~25bp to 79bp. The underperformance is in line with the post-crisis experience, as the A-AA differential has a tendency to widen as rates rise, but we think it is overdone. In the past couple of months, A-rated bonds have underperformed other portions of the index, even as the muni market has performed relatively well. Excluding

FIGURE 11
5s10s AAA-rated tax-exempt GO yield curve (bp)



Source: Barclays Research

FIGURE 12
5s30s and 10s30s AAA-rated tax-exempt GO yield curve



Source: Barclays Research

FIGURE 13
AAA-AA and AA-A yield differentials (bp) – Muni Index excluding Puerto Rico



Source: Barclays Research

FIGURE 14
BBB-A yield differential (bp) – Muni Index excluding Puerto Rico



Source: Barclays Research

Puerto Rico-related credits – which have an outsized effect on the yield of the BBB part of the index – the yield differential between the A- and BBB-rated portions compressed ~10bp. Similarly, the spread between AAs and AAAs started compressing in September and has compressed 6bp so far. Furthermore, we think that improving municipal credit quality, as discussed above, could lead to spread tightening.

Sector positioning

In Figure 15, we re-introduce our muni cross-sector relative value heat map. The heat map tool offers a quick way to glean potential relative value opportunities in the tax-exempt municipal space. The table, designed to be read horizontally, delineates yield relationships between various sectors in the Barclays Municipal Index. We rely on yield-to-worst differentials as a measure of value, which is normalized using a percentage scale. For example, if a sector is trading at a yield that is demonstrably above its historical relationship relative to the broader market or another sector – over a one-year period in this case – it potentially offers relative value. Using a specific example, the hospital sector is trading at a relatively wide level compared with the broader muni market, or the Barclays Muni Index, as well as the vast majority of other sectors. Currently, the YTW differential between the hospital sector and the muni index is 111bp – near the wide of the year (112bp) and nearly 30bp off the tight in May – corresponding to a score of 96%. While we believe this is a useful tool, we emphasize that this is a starting point for further credit analysis.

Based on the heat map and our views on sector fundamentals, the following sectors look attractive:

- **Hospital** – The yield differential between hospitals and the Municipal Index was 111bp or 96% of the LTM range. In our view, the fundamentals of the sector have not changed materially, and we think that hospitals, or systems with strong market shares, or those that provide high acuity services, could differentiate themselves.
- **IDR/PCR** – The sector has rallied in the past couple of months and outperformed the Municipal Index. Nevertheless, it still trades at more than 120% of the yield on the U.S. corporate index, offering cross-asset relative value. Given that many of the bonds in IDR/PCR are issued by the same credits as those in the corporate market, we think there is more room for the sector to run. For more details, see *Pockets of Opportunities*, August 22, 2013.

- **Transportation** – The sector trades at a yield of 3.42%, or 35bp wide of the muni index. While it is near the wide of the year (37bp), the differential is just 13bp off of the tight of the year (22bp), suggesting that there is limited room to tighten. Still, many of the larger issuers are strong credits that are the very definition of essential services. In addition, we think these credits will perform well as the economy recovers. Furthermore, many of the bonds in the sector are special revenue bonds which offer strong protection in periods of distress, as demonstrated by the Detroit water and sewer bonds.
- **Water and sewer** – The sector has outperformed the broader muni market in the past few months, but we still believe there is value in the sector. For a more in-depth treatment, see *Water & Sewer: Stable but Not Risk-Free*, October 30, 2013.

HY munis

With yields on the muni HY index at 6.64% and corporate HY at 5.60%, the ratio of Muni HY to corporate HY is at 119%, an all-time high (Figure 16). This ratio has expanded after the May/June rate sell-off, as HY corporates have rallied while yields for HY munis have remained elevated. In our view, HY munis look attractive, given current ratios. While the increase in ratios reflects the duration differences between muni HY versus HY corporates, we note that HY munis are of higher average credit quality (BA3/B1 versus B1/B2) and are tax-exempt. Figure 17 shows the ratio of muni HY to long HY corporates. After adjusting for duration, HY munis still look appealing, as the ratio of HY munis to long HY corporates are well off their 10-year lows.

FIGURE 15
Municipal cross-sector relative value heat map

Percentile of 1y Range															
	Muni	GO	State GO	Local GO	Rev.	Elec	Hosp	Hsg	IDR/PCR	Trans.	Ed	Wtr/Swr	Res.	Lease	SPT
Municipal Index	-	98	92	79	7	7	4	79	37	12	20	30	79	21	58
GO Index	2	-	63	36	2	2	3	74	18	7	5	13	78	2	18
State GO	8	37	-	37	8	7	3	74	18	9	9	16	70	2	23
Local GO	21	64	63	-	1	0	3	73	18	8	4	17	78	14	29
Revenue Index	93	98	92	99	-	36	6	81	58	27	36	47	83	59	89
Electric	93	98	93	100	64	-	27	85	61	58	57	65	83	61	90
Hospital	96	97	97	97	94	73	-	86	95	98	96	92	87	77	93
Housing	21	26	26	27	19	15	14	-	20	18	21	22	41	15	20
IDR/PCR	63	82	82	82	42	39	5	80	-	36	51	42	78	50	58
Transportation	88	93	91	92	73	42	2	82	64	-	55	60	81	61	85
Education	80	95	91	96	64	43	4	79	49	45	-	41	84	62	80
Water/Sewer	70	87	84	83	53	35	8	78	58	40	59	-	86	59	69
Resource	21	22	30	22	17	17	13	59	22	19	16	14	-	6	20
Leasing	79	98	98	86	41	39	23	85	50	39	38	41	94	-	76
Special Tax	42	82	77	71	11	10	7	80	42	15	20	31	80	24	-

Note: As of November 29, 2013. This table should be read horizontally. Light blue shading represents relatively tight (25th percentile threshold) relationships, and gray shading with bolded text represents relatively wide (75th percentile threshold) relationships. Figures indicate the percentile at which the current YTW differential between the two sectors stands relative to the LTM range. For example, hospital minus the municipal index is at the 96th percentile of the LTM differential range, so hospital is relatively wide versus the broader muni market. State GO minus the municipal index is at the 8th percentile of the LTM differential range, so the state GO sector is relatively tight versus the broader muni market. Source: Barclays Research

FIGURE 16
Ratio of muni HY to corp HY (YTW ratio, %)



Source: Barclays Research

FIGURE 17
Ratio of muni HY to long corp HY (YTW ratio, %)



Source: Barclays Research

When we drill down on the muni HY index, no particular sector stands out as being the sole driver of the recent underperformance. Figure 18 shows the current YTW and as a percentage of LTM ranges for individual sectors in the HY muni index. With the exception of the local GO category, YTW for all categories stand at more than 70% of their LTM ranges.

FIGURE 18
Categories in muni HY

Sector	Min YTW	Max YTW	Current YTW	% of LTM Range
State	4.37	6.10	5.89	88%
Local	4.64	8.25	4.84	5%
Education	4.81	6.43	6.29	91%
Hospital	4.57	6.21	6.17	98%
Housing	5.30	6.48	6.28	84%
Power	4.23	6.40	6.13	87%
Resource recovery	5.33	9.50	8.90	86%
Transportation	3.56	6.08	5.93	94%
Water & sewer	3.96	7.59	7.08	86%
Leasing	5.24	7.40	7.12	87%
Special tax	5.05	6.12	5.79	69%
IDR/PCR ex-tobacco	5.36	7.54	6.89	70%
Tobacco	6.01	8.03	7.57	77%

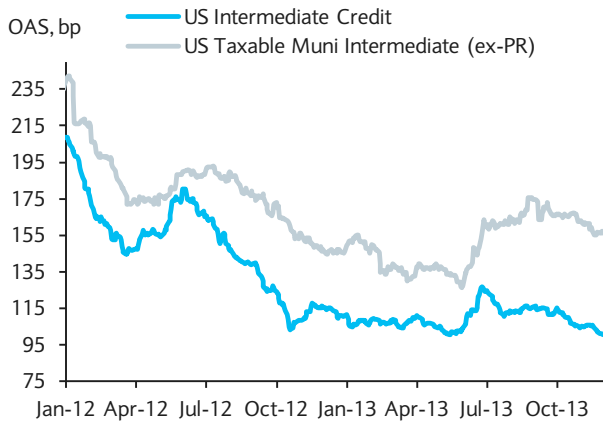
Note: Based on an LTM (last 12 months) timeframe. % of LTM range = (current YTW – min YTW) / (max YTW – min YTW). Source: Barclays Research

Taxable munis

Intermediates offer value

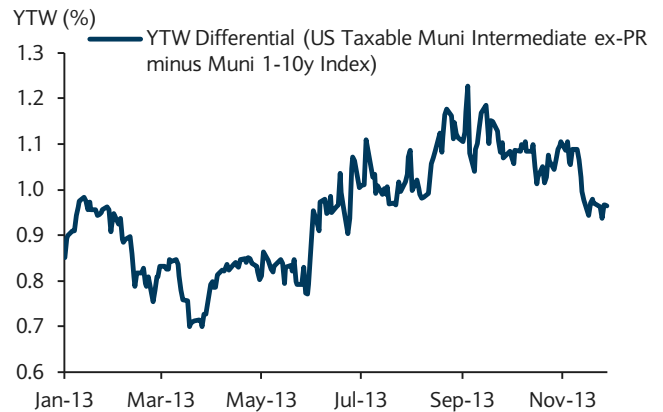
Given the potential higher rate environment next year, investors skittish about long duration assets may wish to consider intermediate taxable munis. We acknowledge that offerings in the intermediate taxable muni space are somewhat more limited. However, in our view, the relationship between intermediate taxable munis and intermediate credit appears somewhat dislocated currently. Figure 19 shows intermediate taxable munis (excluding Puerto Rico-related credits) against the intermediate credit index. Here, the intermediate taxable muni index (ex-PR) trades 56bp behind the US Credit Intermediate index. This 56bp differential is at its post-January 2012 wides, well off the tight of about 6bp in May 2012. This suggests that

FIGURE 19
Intermediate Taxable Munis (ex-PR) and US Credit Intermediate Index, OAS (bp)



Source: Barclays Research

FIGURE 20
US Taxable Muni Intermediate ex-PR minus Muni 1-10y Index, YTW Differential (%)



Source: Barclays Research

intermediate taxable munis represent good relative value at current levels, in light of their higher ratings (A1/A2 for taxable munis ex-PR, versus A2/A3 for intermediate credit).

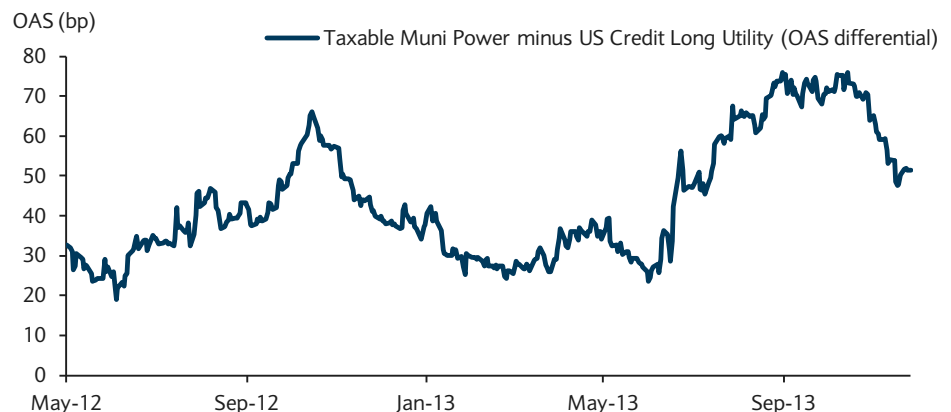
On a YTW basis, intermediate taxable munis (ex-PR) offer 96bp of pickup versus the tax-exempt Municipal 1-10y Index. This differential is 26bp away from the year-to-date tight of 70bp, suggesting that intermediate taxable munis offer some value versus their tax-exempt peers as well (Figure 20).

Choose wisely within long taxable munis

Overall, upside/downside in long taxable munis has become less attractive in recent months, given potentially higher rates next year and the fact that spreads have rallied meaningfully. Certain sectors, however, may still see meaningful spread compression, which should help offset effects from higher Treasury yields. Investors familiar with corporate financial analysis may wish to consider the taxable muni power sector, which offers spread pickup versus the utilities sector on the corporate side.

Figure 21 shows the spread differential between taxable muni power index and the long portion of the US Credit Utilities. The former trades wide of the latter, despite being of higher credit quality (AA3/A1 versus A3/BAA1). Though the spread differential between the two is away from recent wides, we believe power bonds still have room to run versus corporate utilities.

FIGURE 21
Taxable Muni Power (AA3/A1) minus US Credit Long Utilities (A3/BAA1) – OAS differential



Source: Barclays Research

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