

Stop the insanity



Overview: Stop the insanity

The rally that followed the Fed's decision not to "taper" its purchases will not last for long, in our view. For now, though, the market has to deal with the turmoil created by the government shutdown and the impending bump against the federal debt ceiling.

How high can yields go?

We expect the yield on the 10-year Treasury to be 4% at the end of 2014. History tells us that if inflation remains well behaved, yields will not rise much beyond that.

Tax loss swaps

Investors can use bond capital losses to reduce current tax liability or offset capital gains from equities or elsewhere.

What duration does and doesn't tell you

The duration statistic is very useful for bond investors, but like most statistics it also has its limitations. For non-callable bonds, the duration statistic can over-estimate the decrease in price when yields rise. For callable bonds, it can under-estimate the price decrease. Focusing only on duration also ignores the income from bonds.

Lengthening municipal duration

We have extended our recommended maturity allocations in the municipal market for all three of our Investor Profiles.

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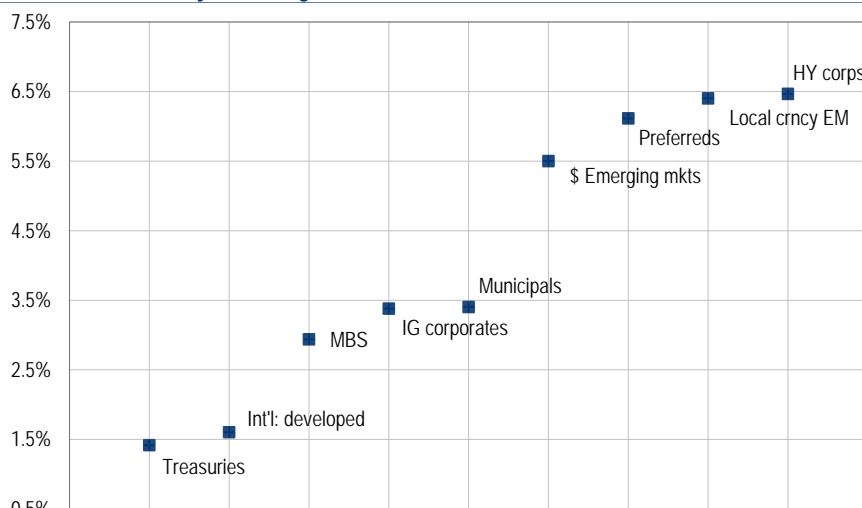
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Click the image above to watch the video.

Chart 1: Bond market yields at a glance



Source: BofA Merrill Lynch Global Research, Bloomberg.

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Refer to important disclosures on page 20 to 22. Link to Definitions on page 19.

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Overview: stop the insanity

Table 1: Bond market returns, USD

	YTD'13	Sept
Cash (3 Mo Tsy)	0.1%	0.0%
Treasuries	-2.4%	0.8%
2 year	0.2%	0.2%
10 year	-5.5%	1.4%
30 year	-12.0%	0.1%
TIPS	-7.4%	1.5%
GSEs	-1.6%	0.6%
Mortgage B'kd	-0.9%	1.4%
CMOs	-0.9%	1.0%
Inv. Grade Corporates	-2.5%	0.8%
High Yield Corporates	3.8%	1.0%
Preferreds	-3.7%	-0.6%
Municipals		
Nominal	-3.2%	2.3%
Taxable Equiv (28%)	-2.0%	5.2%
Non-US IG Gov'ts	-3.5%	2.5%
Emerging Markets, USD	-6.8%	2.7%
Emerging Markets, Local	-5.4%	4.0%

Source: BofA Merrill Lynch Global Research, Bloomberg

We believe that the rally that followed the Fed's decision not to "taper" its asset purchases at the recent FOMC meeting will not last for long. For now, though, the market has to deal with the turmoil created by the government shutdown and the impending bump against the federal debt ceiling.

Our economists were correct in arguing that the Fed would defer to the economic data that showed both economic growth and inflation lower than desired. Still, a tapering and eventual elimination in bond purchases is almost inevitable. We think the Fed will announce the first steps at the December FOMC meeting. When that happens, yields are likely to head back higher.

That said, the potential rise in yields needs to be put in some perspective. We address that topic in the next article. Our target for the 10-year Treasury yield at the end of 2014 is 4.0%. That's a good bit higher than it is today, but perhaps not as high as many investors fear. Many investors appear to use the high yields of the 1970s-1980s as the benchmark, but our look at long-term historical data suggest that period is an exception. That suggests that much of the rise in yields that we are likely to get has already happened.

The upcoming brush against the debt ceiling is a greater potential concern, in our view, than the government shutdown. Through all the budget disarray of recent years, the market has continued to hold the quality and safety of US Treasuries in high regard. Even now, market pricing suggests little expectation of a potential default or delay in payments. Even a temporary "technical" default risks another credit downgrade, and tarnishing the view of Treasuries as a safe haven. Treasuries actually rallied after the S&P downgrade in August 2011 in the wake of sharp selloffs in other markets. The response to another downgrade might not be as favorable. For a discussion of the potential economic effects see [US Economic Watch: On the brink 30 September 2013](#).

Assuming that the damage to the economy is limited, we think that risk assets will ultimately outperform Treasuries. In the taxable market, we favor high yield. We think that the municipal market has largely absorbed the unsettling effect of the Detroit bankruptcy, although Puerto Rico remains a concern. The bigger picture is that most municipalities are seeing improved revenues as the economy grinds higher. We have shifted our recommended allocations in the municipal market towards longer maturities. See page 12.

We recommend that investors employ portfolio laddering to balance the better yield that comes from extending maturity against the greater potential price losses from further yield increases. See our recent publication for more details. [The Fixed Income Digest: Dealing with a down market 03 September 2013](#)

How high can yields go?

We expect the yield on the 10-year Treasury to be 4.0% at the end of 2014, up from 2.6% now. We don't have a forecast beyond 2014, but history tells us that if inflation remains well behaved, yields will not go much higher than that.

The main driver of yields recently has been the asset purchases by the Federal Reserve. The Fed is buying \$45 billion per month in Treasury securities and \$40 billion per month in mortgage backed securities. The Treasury purchases equate to about 80% of Treasury issuance in 2013, and the MBS purchases add to the shrinkage that is already occurring in that market. These purchases are having a ripple effect throughout the bond market. Our economists, who were correct in doubting that the Fed would begin tapering purchases in September, expect the Fed to be tapering its purchases in December.

There is little doubt in our minds that the Fed securities purchases are keeping yields lower than they would otherwise be. Once the Fed ends those purchases, yields will return to "normal". What will that be?

What's normal?

For many of us, our notions about "normal" yields are defined by recent history. Veteran investors remember the double digit yields of the late 1970s/early 1980s when inflation was also running in double digits. In 1981, the yield on the 10-year Treasury climbed as high as 15.8%. The average since 1975 has been roundly 6.75%.

The 70s were not the norm

But a longer look at history suggests that the 1970s/1980s were as much of an anomaly as the current period.

Chart 2 takes the 10 year Treasury yield back 223 years to 1790. Although it is certainly interesting to look that far back in time, we acknowledge that the historical conditions are far from comparable. In the early days of the Republic the US was not considered the financial safe haven that many people view it to be today (government shutdowns and all), suggesting a less friendly borrowing environment at that time.

Even with that bias, the high yields in 1970s/80s stand out as a marked exception to the historical experience, as Chart 2 on the next page shows. Since 1790, the 10-year Treasury yield has averaged just under 5% and has been above 6% only 22% of the time.

Enter inflation

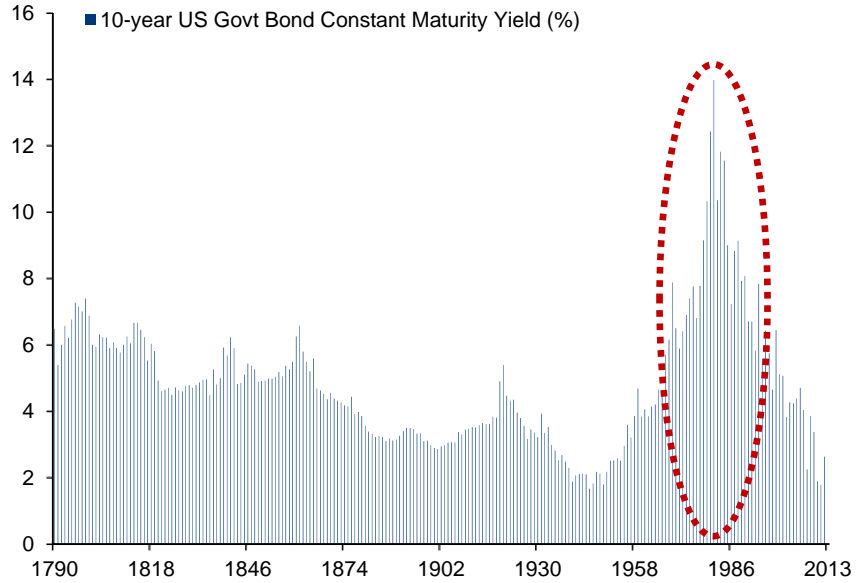
Over time inflation is the primary determinant of interest rates. Bond buyers are lending money. Inflation erodes the purchasing power of the principal value that the lenders receive when the bond matures, and of the interest payments along the way. Investors who expect higher inflation will demand higher yields in order to compensate for the lost purchasing power.

Chart 3 takes the inflation-adjusted yield on the 10-year Treasury, that is, the yield minus the growth in consumer prices over the prior 12 months, back to 1876, as far back as we have monthly data. We call this the "inflation-adjusted" yield and use it as a proxy for the "real" yield. A better measure of the real yield would use *expected* inflation over the 10-year holding period, but that is not available.

The double digit yields of the late 1970s/early 1980s were a historical anomaly.

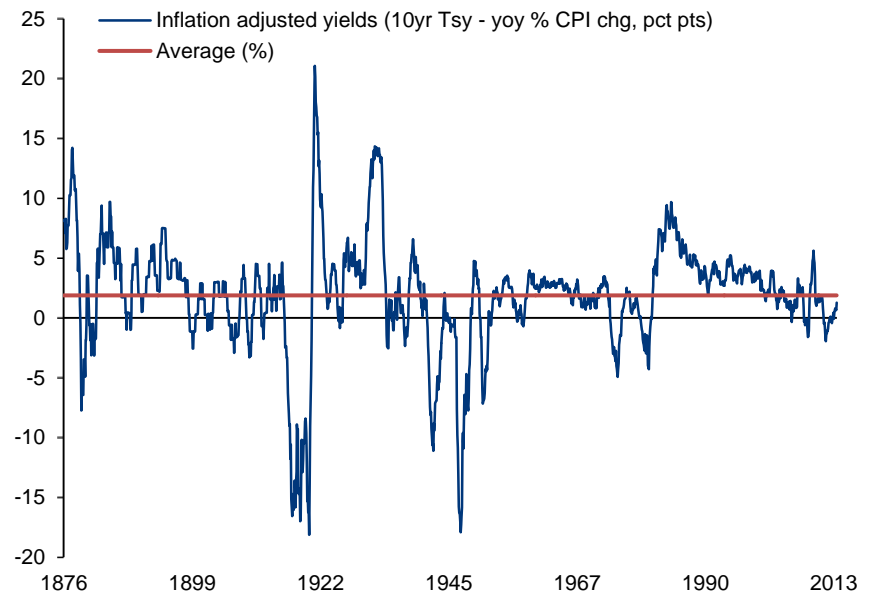
The inflation adjusted yield is has fluctuated considerably over time, but has averaged about 1.9% since 1876. Much of the volatility in inflation-adjusted yields resulted from actual inflation turning out to differ from expected inflation. For example, the oil price shocks that caused the double-digit inflation of the mid 1970s came as a surprise to most investors, causing the inflation-adjusted yield, again measured based on past inflation, to fall below zero.

Chart 2: History of long yields (10yr UST)



Source: Global Financial Data, BofA Merrill Lynch Fixed Income Strategy Research

Chart 3: Inflation adjusted yield



Source: Global Financial Data, BofA Merrill Lynch Fixed Income Strategy Research

If inflation averages 2%, then the 10-year Treasury yield should not rise above 4%-5%.

Once high inflation became a fact of life and expectations became imbedded in business and labor contracts, investors made the opposite mistake. Yields were pushed higher by the expectations of inflation that turned out to be too high. We use the historical average of roughly 1.9% as our guide of where the inflation adjusted yield will average over time.

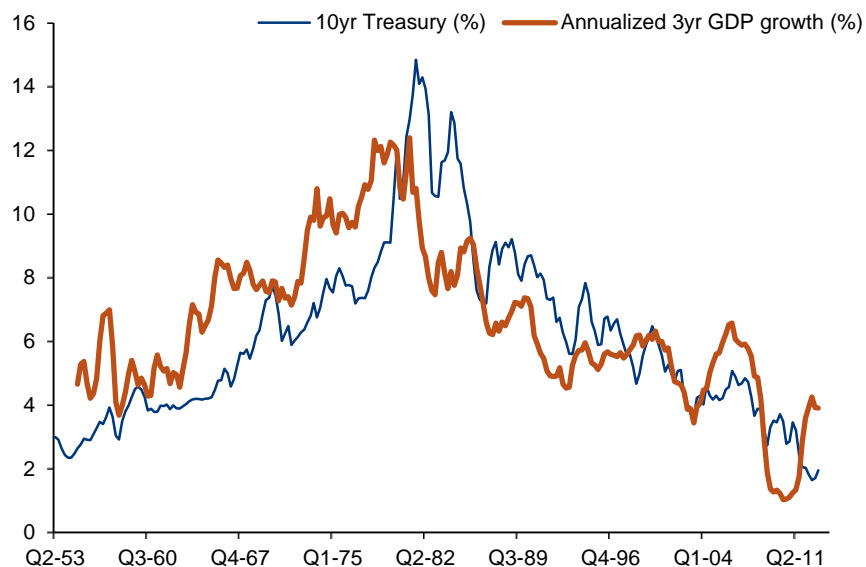
2 + 2 = 4

We get to our estimate of the central tendency for the 10-year Treasury yield very simply. Chart 3 showed that the average inflation adjusted yield has been about 1.9%. Using that average, if we are right that inflation stays near 2%, the yield on the 10 year Treasury will settle at about 4%. We can allow for some overshoot, and say that the 10-year yield should stay in a 4-5% range.

Yields vs. nominal GDP

Another approach to gauging the course yields is to look at nominal GDP growth (real growth plus inflation). Economic growth theory tells us that the economy's growth rate should equal the interest rate. Chart 4 shows a fairly close fit for nominal GDP growth against the 10-year Treasury yield. This metric argues for a 10-year rate closer to 5% than 4%.

Chart 4: 10-year Treasury yield tracks nominal GDP growth



Source: Federal Reserve Board, Bureau of Economic Analysis, BofA Merrill Lynch Global Research

Risks

If the yield on the 10-year Treasury reaches 4% by the end of 2014 as we forecast, the total return between now and then would be about -7%.

The near term risk is that economic growth stays weak and the Fed continues with its securities purchases. Even a modest tapering in purchases would probably not do much to raise yields given the relatively low pace of both public and private sector borrowing. Under that scenario, it could be a slow climb to the 4.0% Treasury yield that we are targeting. The debt de-leveraging process throughout the economy is in its sixth year, and history tells us that it could last a few years longer.

For now though, de-leveraging, slow economic growth, and ongoing Fed asset purchases should restrain the rise in yields.

Longer term, the risk is that inflation winds up higher than the Fed expects and wants. At some point, the economy will recover enough for the Fed to begin withdraw some of its massive stimulus. It remains to be seen if this can be done without inflation creeping higher, especially when other central banks are pursuing expansionary policies as well. To the extent that inflation climbs much above 2%, then Treasury yields will likely exceed the 4%-5% rate that we see as the norm.

What to do

Let's start with some simple facts. The Fed's asset purchase program, combined with its intent to keep short term rates near zero at least until the unemployment rate falls to 6.5% is holding down yields. But at some point that help from the Fed will end, and as that day approaches, yields are likely to climb from where they are today.

Yields on intermediate and long-term maturities are a good bit higher than they were a few months ago, but probably not as high as they will be a year from now. We think portfolio laddering is the best way to balance the benefit of these higher yields against the potential for price losses if yields rise further.

See our recent publication for more details. [The Fixed Income Digest: Dealing with a down market 03 September 2013.](#)

Tax loss swaps

The bond market selloff of the past few months affords investors a chance to use bond capital losses to reduce current tax liability or offset capital gains on equities or elsewhere. You could then replace the security you sold with another one, subject to some limitations that we will discuss.

Capital losses can be offset against capital gains. Excess losses can be applied against ordinary income up to \$1,500 for single filers, and \$3,000 for joint filers

The basics

Federal tax law requires you to match short term (one year or less) gains and short term losses, and then long-term (longer than one year) gains and long term losses, and then combine the two. Capital losses that exceed capital gains can be applied against ordinary income for up to \$1,500 for single filers and \$3,000 for joint filers. That aspect is more valuable than offsetting capital losses because ordinary income is taxed at a higher rate than capital gains. Remaining capital losses beyond \$1,500/\$3,000 can be applied against future capital gains.

The top tax rate on ordinary income is 39.6% and the top rate on capital gains is 20%. At high income levels, capital gains are subject to the 3.8% medicare surtax, making the top effective rate on capital gains to 23.8%.

An example

We will begin with a general example to illustrate the potential benefit from tax loss harvesting. This example might not apply to all investors. Please consult your tax advisor for the specifics that apply to your situation.

The example in Table 2 considers an investor who owns a security that could be sold at a \$1,000 loss. We assume that the investor faces the top rates for ordinary income and capital gains as described above.

In Case 1, we assume that the investor has already realized a \$1,000 capital gain for 2013. By itself, that sale would result in a \$238 tax liability (the 23.8% effective tax on capital gains times \$1,000). Now suppose the investor decides to realize the \$1,000 capital loss as well. That sale would result in a \$238 capital loss, which would offset the tax liability from the sale of the profitable position.

In Case 2, we assume that the investor does not have a capital gain to offset with the \$1,000 loss. Since the loss is within the \$1,500/\$3,000 threshold, our investor

Table 2: Harvesting tax loss

Assumptions	
Tax Rates	
Ordinary income	39.6%
Capital gains	20.0%
Medicare surtax on investment income	3.8%
Capital loss on asset you are considering selling	(\$1,000)
Case 1	
Offsetting Capital gain	
Realized capital gain	\$1,000
Tax liability from capital gain	\$238
Tax liability from realizing capital loss	(\$238)
Case 2	
No offsetting capital gain	
Change in tax liability from selling	(\$396)

Source: BofA Merrill Lynch Global Research

could apply the entire loss against ordinary income. In the 39.6% tax bracket, that sale reduces the current tax liability by \$396.

In the municipal market, there are some potential considerations that arise with market discount bonds. See [Municipals Weekly: All eyes on Washington 27 September 2013](#).

What next?

If you purchase another security within 30 days, be aware of the Wash Sale rule.

You can turn around and purchase the security that you declared the loss on, provided you wait for the required 30-day period under the “Wash Sale” rule. Under that rule you would not qualify for realizing a capital loss if you purchase a “substantially identical” security within 30 days of the sale. The problem with waiting 30 days or longer to purchase the security is that you don’t know what could happen to prices in the meantime.

In order to be able to declare the loss and purchase a new security within the 30 day period after the sale, the new security must not be “substantially identical” to the one that was sold. According to the IRS Code:

“Bonds and other debt instruments are not substantially identical if they are substantially different in any one material feature, or in several material features considered together. For this purpose, the important features of the instruments include (1) whether the securities have the same issuer or obligor and (2) whether there is similarity in earning power, interest rate, value of assets or security, preference, conditions of retirement, dates of maturity, and call provisions. Terms and features that are not considered material include the interest payment date, issuance date, and whether the bonds are registered or bear coupons.”

For two bonds not to be considered substantially identical, they bonds must either be from different issuers, excluding issuers that were a predecessor or successor of the other, or must have materially different security, coupons, maturity or call provisions. For bonds from the same issuer, “material differences” in bond structure are not clearly defined. As a result, a tax loss swap into a bond from the same issuer with minor differences in coupon, maturity, or call date may result in a Wash Sale, meaning you could not realize a capital loss on the sale. For more details see page 9 of the Municipal Weekly publication referenced above.

Note that the appeal of realizing tax losses usually stems primarily from the time value of money, rather than long term savings on taxes. For example, suppose you sold an asset at a \$5,000 capital loss and you replace it with another one. Let’s say the asset you buy eventually rises in price by \$5,000. If you sell at that point, you have a \$5,000 capital gains tax liability. All else equal, you have essentially deferred your tax liability to a future year.

Tax Note

This information is not intended to provide tax advice or to be used by any person to give tax advice. Taxpayers may not use this information to avoid taxes or penalties on taxes that may be imposed on such persons or taxpayers.

This information is provided to support the analysis of financial instruments or transactions discussed in the report. Clients are urged to seek tax advice based upon their particular circumstances from an independent and professional tax advisor.

Selling a security at a loss and then purchasing another one that rises in price essentially defers capital gains.

What duration does / doesn't tell you

The duration statistic is very useful for bond investors, but like most statistics it has its limitations.

Duration 101

The modified duration statistic, generically called simply duration, provides an estimate of how the price of a bond or bond fund will change for a one percentage point change in yield. For example, a duration of 5.0 suggests that a one percentage point rise/decline in yield would bring a 5.0% decline/rise in price.

Uses and limitations

Duration provides a good "first pass" of the sensitivity of the price of a bond or bond fund to changes in yield, and also a good way to compare the sensitivity of different securities to changes in yield. But there are at least two problems with focusing only on duration when considering the potential losses if yields rise:

- The larger the change in yield or the longer the time period over which the yield change occurs, the less accurate duration is as an estimate of the price change.
- Focusing only on duration ignores the income that the bond pays. That's an important consideration, particularly over long holding periods. Most people buy bonds for the income!

We will initially discuss the application of duration for single non-callable bonds. We will then discuss bonds held in funds and callable bonds.

Example: single, non-callable bond

For non-callable bonds, the duration statistic over-estimates the price decline for large yield increases and for long time periods.

In Table 3 we consider a 10-year bond priced at par with a coupon and yield of 3.00%. The duration of this bond is 8.7 years.

What happens to the price of the bond if the market yields rise by a percentage point to 4.0%? Based on the duration, you would estimate an 8.7% decline in price. As mentioned, that estimate becomes less accurate the larger the change in yield and the longer the timeframe over which the yield rises.

Let's first relax the "small" yield change assumption. An immediate one percentage point rise in yield to 4.00% would reduce the price¹ to 91.83. That's an 8.2% decline in the price, a bit less than the 8.7% decline that would be predicted from the duration of the bond.

Now let's extend the time horizon to a full year. If the yield on our single bond were 4.00% a year from now, its price would fall from 100.00 to 92.51. That's a price decline of 7.5%, taking us even further from the 8.7 duration statistic. With the passage of a year, the duration of the bond has shortened—there are now nine years remaining to maturity.²

You can calculate duration in Excel with the MDURATION function. See our [primer on duration and convexity](#) for additional details of the calculation.

Table 3: 10yr bond, 3.00% coupon, 3.00% yield

Duration:	8.7
Price decline for 1 pct point rise in yield	
Instantaneous	-8.2%
One year ahead	
Price return	
No roll	-7.5%
Roll (0.12% yield decline)	-6.6%
Total return	
No roll	-4.5%
Roll	-3.6%

Source: BofA Merrill Lynch Global Research

¹ You can calculate a bond price in Excel with the PRICE function. See our primer for a discussion on how to do the calculation manually.

² Also, the duration of a non-callable bond declines as yields rise. In contrast, the duration of callable bonds rises as yields rise. See the next section.

The lift from the roll

Additionally, an individual bond might benefit from the “roll” down the yield curve. Suppose the yield on a 9-year bond is 0.12 percentage point less than the yield on a 10-year bond, and that all market yields rise by a full percentage point over the course of a year. A year from now, when our 10-year bond has 9 years remaining to maturity, its yield would be 2.88% (the one percentage point rise in market yields, less the 0.12 percentage point decline in yields in moving from ten years to nine years. That would further reduce the price decline from what the duration statistic suggests. As Table 3 shows, the price decline now becomes 6.6%, which is 2.1 percentage points less than the duration.

Don't forget the income

By focusing only on duration you can overlook the income that the bond pays. Using the example above, the income adds 3.0% to the return from the bond over the course of a year. That puts the total return at -4.5% for the case without the roll down the yield curve, and -3.6% with the roll. That takes us even further from the estimate implied by the 8.7 duration figure.

Funds less likely to benefit from shortening in maturity when yields rise

The calculation is trickier for bond funds. The maturity of a fund is less likely to shorten over time as would be the case for an individual security. That means that the duration statistic is likely to give a better estimate of the price change as yields rise. But as with individual securities, duration ignores the income that the fund pays.

Calculations for callable bonds

Unlike with non-callable bonds, duration could under-estimate the sensitivity of the price to changes in yield. That's because of the *negative convexity* of non-callable bonds: their duration generally rises as yields rise.

For callable bonds such as mortgage backed securities, preferreds, and most municipals and high yield corporates, duration depends upon when the bond will be redeemed, which in turn depends upon, when, or if, the issuer calls the bond. These considerations are not a factor with investment grade corporate bonds, most of which have make-whole calls ([see our primer on make-whole calls](#)), rather than traditional calls, or with Treasury securities, most of which are not callable.

Duration to worst

The tricky part about determining the maturity of a callable bond is that you don't know when the issuer will redeem the security. For mortgage backed securities (MBS) portions of the portfolio will be redeemed over time as homeowners pre-pay their mortgages.

The simplest way to address the problem is to calculate the duration to the call date and the duration to the maturity date. If the security is priced above the call price, use the duration to call date. If the security is priced below the call price, use the duration to maturity. The rationale is that the issuer is likely to call a security only if it is priced above par.

The problem with this approach arises when the price of the security moves from being priced above par to being priced below par, or vice versa. When that happens, the duration will change sharply. Recently, we have seen the duration of many callable securities, particularly preferreds, extend as the price has fallen below par.

Table 4: Duration: May 2 - Sep 5

	Duration to Maturity	Effective Duration
May 02, 2013		
Munis	9.9	7.4
MBS	3.4	2.9
HY Corps	5.0	4.1
Preferreds	13.9	4.9
Sep 05, 2013		
Munis	9.4	8.2
MBS	5.6	5.4
HY Corps	4.9	4.4
Preferreds	12.7	7.8

Source: BofA Merrill Lynch Global Research

The negative convexity of callable securities means that the duration rises as yields rise, making their price more sensitive to higher yields.

Effective duration

The effective duration statistic attempts to address this problem by implicitly estimating the probability of a call. Effective duration is generally not available for most individual bonds, but many bond open end funds and ETFs provide the statistic on their web pages.

But even effective duration can underestimate how prices will decline if yields rise. A rise in yields reduces the prospects that securities will be called, and therefore lengthens the effective duration of a bond.

Table 4 compares the effective durations of different callable sectors of the bond market. We show the values for May 2, the recent bottom in 10-year yields, and September 5, when the 10-year yield nearly touched 3.00%.

The extension in duration was especially acute in the mortgage backed securities (MBS) market—from 2.9 to 5.4. Even so, 5.4 is not a very long duration.

The damage was greater for preferreds. Based on our index, the duration of fixed-rate preferreds has climbed from 4.9 to 7.8 between the recent low and high in Treasury yields. In contrast, the extension for high yield was fairly small—from 4.1 to 4.4. Munis lie in between, with an extension from 7.4 to 8.2 years.

As mentioned, in bond lingo, the extension in duration comes from the *convexity* of callable bonds. Unlike for non-callable bonds, the duration of callable bonds rises as market yields rise.

Investors who want a “worst case” treatment should look at both the effective duration and the duration to maturity. The latter measure captures the extreme case when yields rise enough that a call no longer looks feasible and the security will remain outstanding until maturity. Using our preferred master index as an example, the duration to maturity is 12.7. That an estimate of the *maximum* percentage by which the price could decline for a one percentage point rise in yields.

Finally, as with non-callable bonds, the duration measure does not consider the income that the bond provides. That’s a particularly big shortcoming for preferreds and high yield bonds which have higher than normal income.

Lengthening municipal duration

Table 3: Tax-exempt allocation

Maturity	Market weight	New Allocation			Prior Allocation			Change		
		Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive	Conservative	Moderate	Aggressive
1-5 years	19%	90%	10%	10%	100%	10%	10%	-10%	0%	0%
5-10 years	18%	10%	40%	20%	0%	50%	30%	+10%	-10%	-10%
10-15 years	13%	0%	25%	35%	0%	20%	30%	0%	+5%	+5%
15 years +	50%	0%	25%	35%	0%	20%	30%	0%	+5%	+5%
	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%
Avg Eff Duration	8.04	2.87	7.21	7.98	2.57	6.83	7.60	0.30	0.39	0.39
Avg Yield	3.40	1.14	3.18	3.49	0.98	3.02	3.34	0.16	0.16	0.16

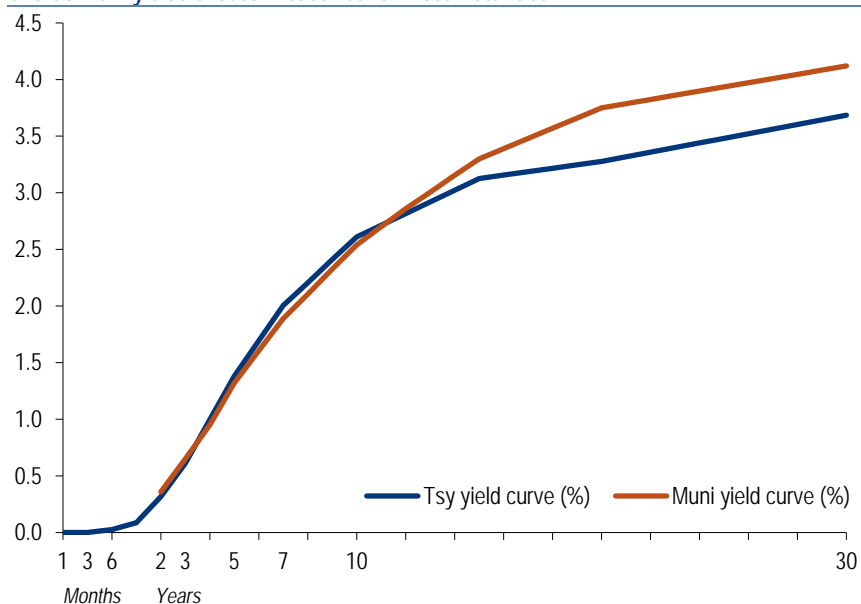
Source: BofA Merrill Lynch Global Research

We have changed our allocations for municipal bonds, lengthening the duration for all three investor Profiles. The Table above shows the changes.

For the Moderate and Aggressive Profiles, our allocations take 10% from the 5-10 year maturity ranges, and add 5% to both the 10-15 year and 15 year + range. For the Conservative Profile, where the maturity allocation has historically been entirely in the 1-5 year maturity range, we are moving 10% to the 5-10 year maturity range.

The rationale is that municipal yields have risen considerably, even after the recent rally, and yield ratios to Treasuries are at abnormally high levels. Also, the municipal yield curve is fairly steep by historical standards. Chart 5 below shows that yield on high quality municipals exceed the pre-tax yield on Treasury securities for maturities longer than 10 years.

Chart 5: Muni yields exceed Treasuries for most maturities



Source: Federal Reserve Board, BofA Merrill Lynch Global Research

Views at a Glance

TAXABLE MARKET	Views	Risks	Emphasis
Treasuries			
Nominal	High quality, but income is too low.	Higher inflation, better economy	1-5 years, out to 10 years with ladders.
TIPS	Negative yields are unappealing, but breakevens vs. nominals are reasonable.	Rise in real Treasury yields.	5-10 year maturities. Individual TIPS are better suited for tax-deferred accounts.
STRIPS (zero coupons)	Low re-investment rates make zeros attractive for long-term savings goals.	Price is more sensitive to rising yields than for coupon bonds	1-5 years, out to 10 yrs with ladders. Better suited for tax-deferred accounts.
Government Sponsored Enterprises/Agencies			
Fixed Coupons	Government is likely to support the payments if Fannie and Freddie can't. Narrow spreads.	Same risks that apply to Treasuries.	1-to-5-year maturities, out to 10 years with ladders.
Step-Ups	Government is likely to support the payments if Fannie and Freddie can't.	Same risks that apply to Treasuries.	Favor securities with near-term coupon resets.
Investment Grade Corporates			
	Modestly growing economy should allow for outperformance for the next few months.	Debt issuance to finance share buybacks.	Most overweight recommendations are in aerospace and defense and diversified operations.
High Yield Corporates			
	Should outperform if economy improves.	Risk of weaker economy from fiscal restraint.	Exposure to market through diversified funds.
Preferreds			
	Rising yields pose a risk for long duration securities. We favor premium priced issues with attractive yields to call.	Rise in market yields, weakening in the economy.	1% allocation for the Aggressive and Moderate Profiles 0% for the Conservative profile.
International			
Emerging Markets	Near term risk from slower economic growth, fund outflows, and higher Treasury yields.	Higher inflation, central bank rate hikes, drop in oil prices. Follow through from slowing in China.	Recommend small and diversified exposure for both the Moderate and Aggressive profiles.
Developed markets	Main appeal for U.S. investors is for currency exposure.	Heightened sovereign risk concerns, rise in the \$.	Small allocation for Moderate and Aggressive profiles.
Mortgage-Backed Securities			
Mortgages, CMOs	High quality, ongoing lift likely from Fed purchases.	Less aggressive than expected series of Fed purchases. Extension risk if yields rise.	We favor exposure through funds.
Municipal Market			
Tax-exempt Munis	Fiscal and pension challenges can likely be managed through diversification and prudent security selection.	Pension obligations becoming more problematic. Potential change in the tax treatment of municipal interest.	5-to-15-year maturities. General obligation and essential service revenue and hospital bonds.
Build America Bonds (BABs)	Relatively attractive versus corporate bonds of similar maturity and credit rating.	Long duration gives rise to greater interest rate risk.	Limited exposure. Might be better suited for IRAs and 401(k)s.

Source: BofA Merrill Lynch Global Research. Bold print indicates changes from last month.

Asset Allocation

Taxable and Tax-Exempt Markets

The Table below shows our recommended asset allocation models that combine both taxable and tax-exempt securities.

Table 5: Combined municipal and taxable recommended allocations by Investor Profile

	% of US Txble Mkt	Conservative			Moderate Federal tax bracket			Aggressive		
		<25%*	28%	43.4%	<25%*	28%	43.4%	<25%*	28%	43.4%
Munis	NA	0%	45%	50%	0%	58%	63%	0%	75%	80%
Treasuries & CDs	39%	40%	22%	20%	32%	13%	12%	31%	7%	6%
TIPS	4%	3%	2%	2%	4%	2%	2%	4%	1%	1%
Agencies (GSEs)	4%	35%	19%	17%	0%	0%	0%	0%	0%	0%
Mortgage Backed Sec's	24%	2%	1%	1%	23%	10%	8%	19%	5%	4%
Corporates	22%	20%	11%	10%	24%	10%	9%	22%	6%	4%
Preferreds	1%	0%	0%	0%	1%	0%	0%	1%	0%	0%
High Yield	6%	0%	0%	0%	9%	4%	3%	12%	3%	2%
International: Developed	NA	0%	0%	0%	3%	1%	1%	3%	1%	1%
Emerging Markets: USD	NA	0%	0%	0%	2%	1%	1%	4%	1%	1%
Emerging Markets: Local	NA	0%	0%	0%	2%	1%	1%	4%	1%	1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Including tax deferred accounts such as IRAs and 401(k)s

Source: BofA Merrill Lynch Global Research. Numbers may not add to totals due to rounding.

Table 6: Recommended maturity allocation - Taxable market

Maturity range	% of US Mkt	Investor Profile		
		Conservative	Moderate	Aggressive
1-5 years	44%	100%	56%	56%
5-15 years	44%	0%	40%	37%
15+ years	12%	0%	4%	7%
Total	100%	100%	100%	100%

Source: BofA Merrill Lynch Global Research

Table 7: Recommended maturity allocation - Municipal Market

Maturity range	% of Market	Investor Profile		
		Conservative	Moderate	Aggressive
1-5 years	19%	90%	10%	10%
5-10 years	18%	10%	40%	20%
10-15 years	13%	0%	25%	35%
15 years & longer	50%	0%	25%	35%
Total	100%	100%	100%	100%

Source: BofA Merrill Lynch Global Research

Profile of Taxable & Tax-Exempt Bond Markets

Table 8: Sensitivity of total returns on Treasuries to yield changes. 1-year horizon*

Treasury Maturity	Change in Yield				
	-2%	-1%	0	+1%	+2%
2-Year	NA	NA	0.3%	-0.7%	-1.6%
5-Year	NA	5.3%	1.4%	-2.4%	-6.0%
10-Year	20.1%	11.0%	2.6%	-5.0%	-12.0%
30-Year	49.4%	23.7%	3.7%	-12.1%	-24.6%

Source: BofA Merrill Lynch Global Research. * Approximate total return (income plus price change) over a one-year horizon for the given change in yield. Excludes the effect of rolling down the yield curve. NA= Not Applicable because the indicated yield change would push the yield below zero.

Table 9: Sensitivity of total returns on municipals to yield changes. 1-year horizon*

Municipal Maturity	Change in Yield				
	-2%	-1%	0	+1%	+2%
2-Year	NA	NA	0.4%	-0.6%	-1.6%
5-Year	NA	5.3%	1.3%	-2.5%	-6.1%
10-Year	20.1%	10.9%	2.5%	-5.1%	-12.1%
30-Year	47.3%	23.1%	4.1%	-10.9%	-22.9%

Source: BofA Merrill Lynch Global Research. * Approximate total return (income plus price change) over a one-year horizon for the given change in yield. Excludes the effect of rolling down the yield curve. NA= Not Applicable because the indicated yield change would push the yield below zero.

Table 10: After-tax yield advantage of Munis vs Treasuries

Maturity	Federal Tax Bracket			
	25%	28%	35%	43.4%
2-years	12	13	15	18
5-years	28	33	42	54
10-years	58	66	84	106
30-years	136	147	172	203

Source: BofA Merrill Lynch Global Research

Table 11: Return correlation coefficients between S&P 500 and bond market sectors

Sep 2008 - Sep 2013 Correlation Coefficient	
Positively Correlated	
EM Local Currency	0.74
High yield bonds	0.73
EM USD	0.58
Preferreds	0.51
Inv grade corporate bonds	0.37
Non US Inv Grade Svgs (in \$)	0.37
TIPS	0.29
Munis	0.04
Near Zero Correlation	
Mortgage backed securities	-0.08
Agencies	-0.10
Negatively Correlated	
Treasuries	-0.27

Source: BofA Merrill Lynch Global Research Bond Indexes

Bond market returns

Table 12: Total returns (%)

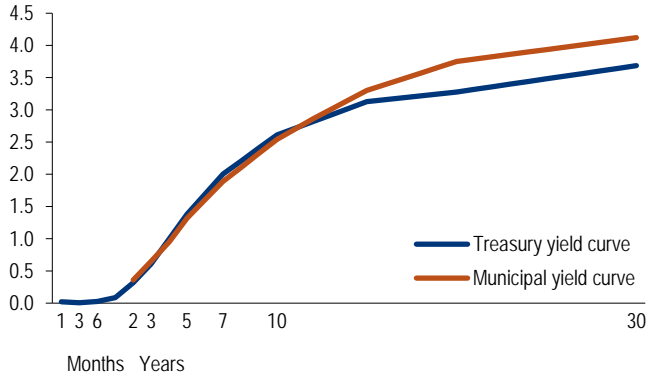
BofAML bond index	ML Ticker ¹	2011	2012	As of 9/30/2013						
				1mo	3mo	12mo	YTD	3yr ³	5yr ³	10yr ³
Treasury Master	G000	9.8	2.2	0.8	0.0	-2.5	-2.4	2.1	4.0	4.2
3-Month Treasury Bills	G001	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	1.7
2-year Treasury	GA02	1.5	0.3	0.2	0.2	0.3	0.2	0.6	1.7	2.6
10-year Treasury	GA10	17.2	4.2	1.4	-0.7	-5.7	-5.5	2.9	5.3	4.7
30-year Treasury	GA30	35.5	2.5	0.1	-3.2	-13.0	-12.0	3.3	5.5	5.9
Agency Master	UAGY	5.3	2.5	0.6	0.4	-1.4	-1.6	1.7	3.7	3.9
TIPS	G00I	14.1	7.3	1.5	0.6	-6.6	-7.4	4.0	5.3	5.2
Corporate Investment Grade Master	COA0	7.5	10.4	0.8	0.9	-1.3	-2.5	4.4	9.0	5.3
AAA-rated	COA1	9.1	4.0	0.4	-0.3	-4.3	-4.1	2.0	5.2	3.9
AA-rated	COA2	6.2	7.4	0.7	0.7	-1.7	-2.4	3.1	6.9	4.3
A-rated	COA3	7.4	9.8	0.7	0.9	-1.7	-2.5	4.1	8.6	4.7
BBB-rated	COA4	8.1	12.0	1.0	0.9	-0.7	-2.4	5.3	10.3	6.2
High Yield Master II	HOA0	4.4	15.6	1.0	2.3	7.1	3.8	8.9	13.4	8.7
BB-rated	HOA1	6.1	14.4	1.0	1.9	4.7	2.0	7.9	12.5	8.3
B-rated	HOA2	4.6	15.0	1.0	2.2	7.4	3.8	8.9	11.3	7.7
CCC and lower rated	HOA3	-1.4	20.3	1.0	3.1	12.2	8.4	11.0	17.0	10.7
Mortgage Master	MOA0	6.1	2.6	1.4	1.1	-1.2	-0.9	2.7	4.7	4.8
Fixed rate investment grade preferreds	POP1 ⁴	4.1	13.6	0.2	-2.6	-0.5	-1.6	4.4	11.3	1.9
DRD eligible	POD0	8.8	12.3	-1.3	-4.7	-3.2	-4.1	5.7	9.0	-3.4
Hybrids	POH0	1.9	11.6	-0.3	-2.2	-1.0	-1.7	3.8	11.3	3.1
REITs	PON0	12.1	6.3	0.4	-7.1	-8.5	-8.9	2.8	11.9	5.5
Foreigns	POS0	-0.7	24.1	0.2	-0.4	3.1	2.0	7.5	16.4	4.9
Floating rate investment grade preferreds	POA0	-10.1	24.3	-2.8	-7.4	-6.2	-8.0	1.3	10.8	NA
Asset-Backed	ROA0	3.0	3.2	0.4	0.6	0.5	0.2	2.1	4.5	3.3
Municipal Master	UOA0	11.2	7.3	2.3	-0.4	-2.8	-3.2	3.3	6.2	4.7
Taxable equivalent ²	UOA0*	13.2	9.1	2.5	0.0	-1.1	-2.0	-1.3	1.3	-0.3
General Obligation	UOAG	10.6	5.6	2.0	0.0	-2.4	-2.6	3.0	5.6	4.5
Taxable equivalent ²	UOAG*	12.6	7.3	2.2	0.4	-0.8	-1.4	-1.5	0.9	-0.3
Revenue	UOAR	11.4	7.9	2.5	-0.5	-2.9	-3.5	3.4	6.4	4.8
Taxable equivalent ²	UOAR*	13.4	9.7	2.6	-0.1	-1.2	-2.2	-1.3	1.4	-0.2
Pre-refunded	UOAF	3.3	1.1	0.5	0.5	0.0	0.1	1.1	3.1	3.1
Taxable equivalent ²	UOAF*	5.1	2.9	0.6	1.0	1.7	1.4	-3.5	-1.7	-1.8
Municipals 1-5 years	UVA0	3.7	1.6	0.4	0.7	0.6	0.7	1.7	3.3	3.0
Taxable equivalent ²	UVA0*	5.4	3.3	0.6	1.1	2.3	1.9	-2.7	-1.3	-1.7
Municipals 5-10 years	U6AX	10.6	4.4	1.8	0.8	-1.0	-1.3	3.5	6.1	4.7
Taxable equivalent ²	U6AX*	12.4	6.1	1.9	1.2	0.5	-0.1	-0.8	1.6	0.0
Municipals 10+ years	U9AX	13.9	9.7	3.1	-1.1	-4.2	-4.9	3.7	7.1	5.0
Taxable equivalent ²	U9AX*	16.1	11.6	3.2	-0.6	-2.5	-3.6	-1.1	2.0	-0.1
Non-US Investment Grade Gov'ts	NOG1	5.5	1.5	2.5	4.2	-5.9	-3.5	0.6	4.4	5.0
Emerging Markets	IGOV	8.2	18.3	2.7	0.8	-3.8	-6.8	5.3	9.8	9.1

¹Merrill Lynch index tickers apply only to the ML Global Index System, accessible through Bloomberg or www.mlindex.ml.com. ²Assumes 28% Federal tax bracket. ³3yr, 5yr, and 10yr returns are annualized. ⁴POP4 used for periods after 3/31/12.

*Price return index. Source: BofA Merrill Lynch Global Research

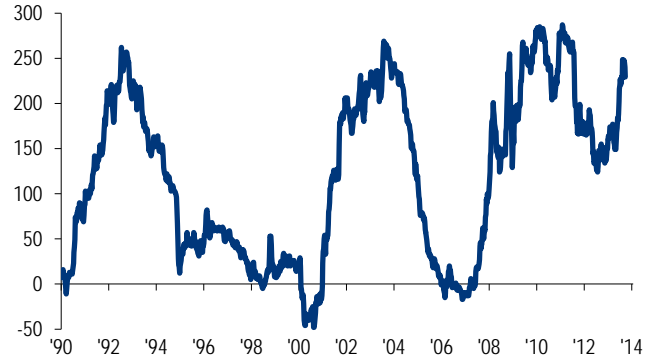
Fixed Income Chartbook

Chart 6: Treasury vs Municipal yield curves



Source: BofA Merrill Lynch Global Research, Bloomberg

Chart 7: Historical 2yr / 10yr Treasury yield spread (basis pts)



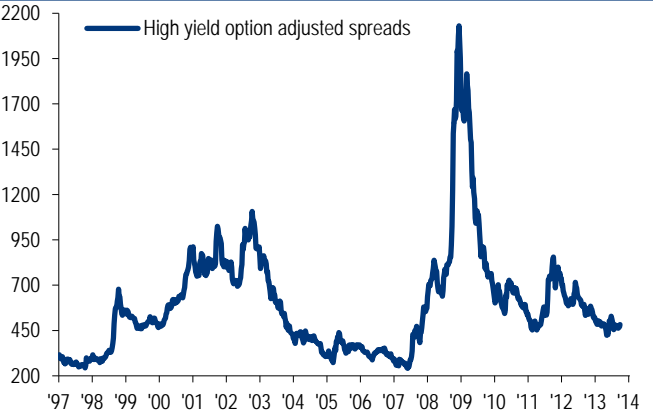
Source: BofA Merrill Lynch Global Research, Federal Reserve Board

Chart 8: BBB corporate spreads



Source: BofA Merrill Lynch Global Bond Indexes

Chart 9: High yield spreads



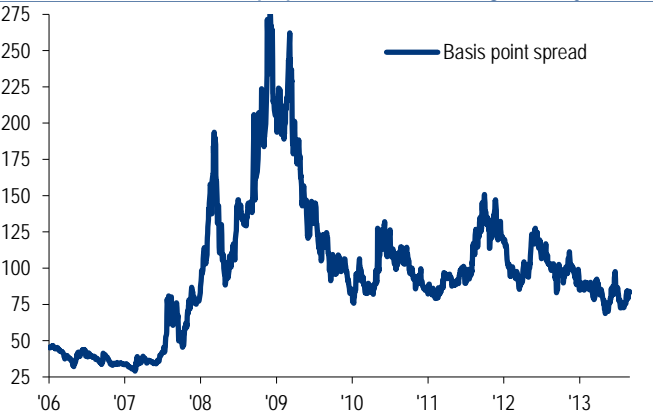
Source: BofA Merrill Lynch Global Bond Indexes

Chart 10: Preferreds vs Long-term Treasuries (yield-to-maturity)



Source: BofA Merrill Lynch Global Bond Indexes

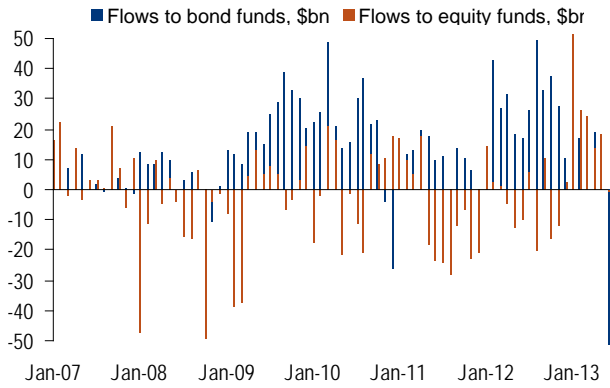
Chart 11: Credit default swap spreads (CDX IG CDSI generic 5yr)



Source: BofA Merrill Lynch Global Research, Bloomberg

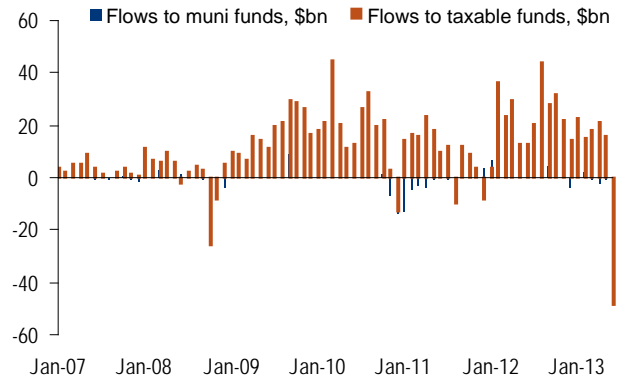
Fixed Income Fund Flows

Chart 14: Equity vs Fixed Income fund flows³



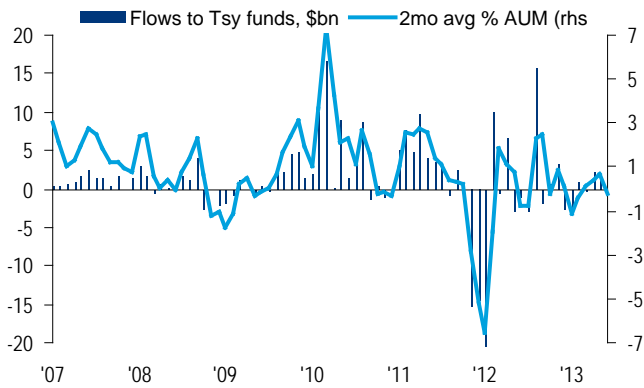
Source: BofA Merrill Lynch Global Research, EPFR

Chart 15: Taxable vs Municipal fund flows



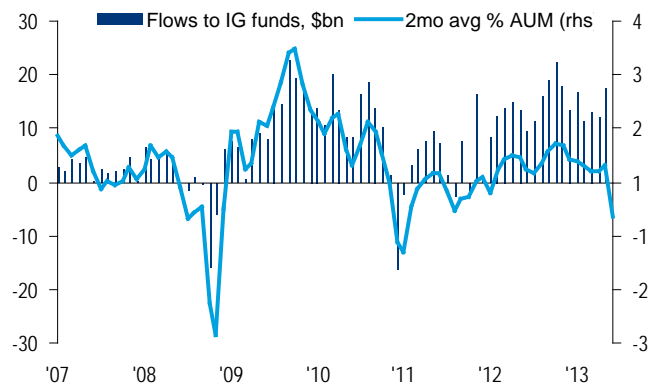
Source: BofA Merrill Lynch Global Research, EPFR

Chart 16: Treasury fund flows



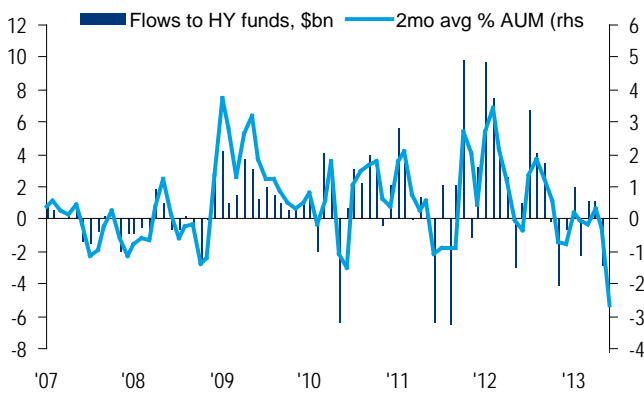
Source: BofA Merrill Lynch Global Research, EPFR

Chart 17: Investment grade fund flows



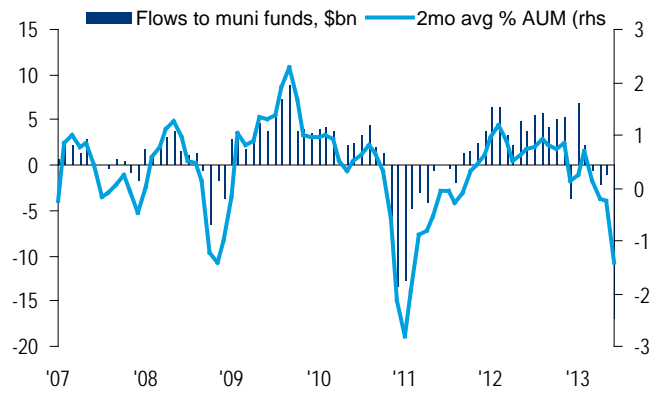
Source: BofA Merrill Lynch Global Research, EPFR

Chart 18: High yield fund flows



Source: BofA Merrill Lynch Global Research, EPFR

Chart 19: Municipal fund flows



Source: BofA Merrill Lynch Global Research, EPFR

³ The monthly flows (US\$) into or out of mutual funds plus exchange-traded funds in the selected asset class.

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Macro

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