4 January 2013 │ 23 pages

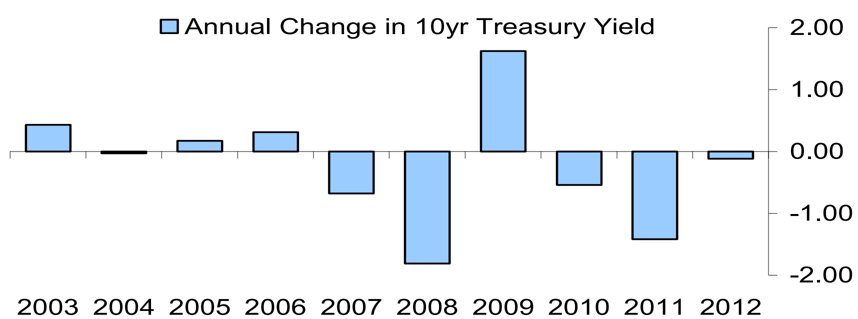
North America

US Rates & MBS Weekly

Le Petite Bargain

- **Core Steepener** — We expect Treasury yields to rise in 2013, but will focus on steepeners for now with the debt ceiling lurking later this quarter.
- **Debt ceiling** — Due to strong seasonal patterns in government deficits we expect the Treasury to reach its hard borrowing limit in mid to late February if legislators fail to act. This could lead to higher yields for late February and March T-bills.
- **TIPS** — The FOMC minutes reveal a Fed that is more sensitive to the size of its balance sheet than the market expected. This should keep longer end inflation expectations capped. However, we think that investors in front end TIPS will be rewarded over the next two to three months, despite the near-term negative carry.
- **Swap spreads** — Stay the course on wideners in 10y. Expect continued issuance related tightening to be modest. Debt-ceiling gyrations in the market should pressure spreads wider.
- **Implied Volatility** — We deem the current risk premium priced into the options market to be insufficient to justify selling gamma.
- **Agencies after the Fiscal Cliff** — Our views and recommendations from the 2013 Outlook (US Agency Notes - 2013 Agency Debt Outlook) still remain very relevant. In particular, we believe that the new deal actually makes the case for buying long-dated agency bullets on asset swap even stronger than before.

Figure 1. Chart of the Week: Treasury Yields Were Nearly Unchanged in 2012



Source: Bloomberg and Citi Research

US Rates Strategy

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Rates Forecast

Figure 2. Rates Forecast as of November 30, 2012

	Model Value (%)	Market Value (%)	3m Forward (%)
Fed Funds Effective	0.00	0.16	0.00
2y Treasury	0.05	0.25	0.05
5y Treasury	0.42	0.63	0.53
5y Forward 5y Treasury	4.12	2.69	2.67
10y Treasury	2.27	1.61	1.60

Source: Citi Research; Model values are from our Fed Funds Path Model, described in the US Rates 2012 Outlook

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2013 US Rates Outlook Conference Call

On Monday January 7 at 9:00 am, in place of our usual weekly conference call, we will hold a 2013 US Rates Outlook call. Please find the contact information below.

*** PLEASE NOTE: THIS DATA HAS CHANGED SINCE 2012 ***

Participant Audio Information:

Toll free:	1-877-819-5744
Toll:	1-719-785-5595
Passcode:	800273

Replay Audio Information:

Toll Free Domestic:	1-888-203-1112
Toll International:	1-719-457-0820
Replay Passcode:	7466288
Replay Availability:	7 days from the call date, available 2 hours after the call

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Summary of Views

Figure 3. Strategy Summary Table

US Rates	View	Recommended Positions
Duration	**Neutral:** We expect 10yr Treasuries to rise in the medium term, but remain neutral for tactical reasons	None
Yield Curve	**Steeper:** We expect the 30yr to be the worst performing part on the curve as a core view.	5yr – 30yr steepener, 70% beta weighted
Swap Spreads	We expect swap spreads to widen.	10y swap spread widener.
Gamma	We are long low strike gamma in 10y tails, un-hedged. We are neutral delta-hedged atm gamma.	Long unhedged gamma in (now) 1m10y through low strike receivers.
Vega	We expect a decline in intermediate vega.	Sell 100mm 3y10y straddles and buy a gamma weighted amount of 6m10y straddles
Inflation	We expect 10y breakevens to head lower while front end TIPS (1y to 5y) are likely to perform well	Sell 5y5y inflation forwards Long 2y TIPS vs. short 10y BEs Long 5y BEs
MBS	Neutral	Buy HLB v. TBA for 3.5s
Agency Debt	Long dated agency bullets provide great insurance for adverse events like the fiscal cliff stalemate even while they garner positive carry to Libor.	**Bullets:** Buy 10- and 20-year agency bullets on assets swap.

Source: Citi Research

US Rates & Curve: Le Petite Bargain

Brett Rose

The Fiscal Cliff episode of 2012 ended much in the spirit of a Looney Tunes cartoon. Policymakers ran full speed over the edge of the cliff, took a number of steps in mid-air and then dove back to the safety of solid ground by means of a 'just beyond year-end' agreement. However, the agreement was probably less 'Grand' than even the most reduced expectations might have expected. Further, by not addressing the debt ceiling in any way means that an Acme Anvil could be falling from above in a matter of months.

The Cons Outweigh the Pros, But that Shouldn't Matter for Now

There was not much for anyone to be proud of in the most recent fiscal negotiation process

On the surface we see more that was bad about this deal than good. Here are some of the major cons with this agreement:

- **No structural reforms –** While the deal did result in some amount of fiscal restraint, it did little to impact the medium to longer term fiscal issues that may ultimately plague the United States.
- **Little sign of legislative competence –** Political dysfunction again required a deadline to force an agreement in a process filled with political snipping from both sides of the aisle. This presumably compounded the uncertainty for businesses and consumers that may have held back economic growth outside of the impact of any fiscal restraint.
- **Debt ceiling in 2-months –** Most importantly, the failure to include raising the debt ceiling or extending the continuing resolution means that the US will be unable to borrow or spend money by the end of the current quarter. Therefore, a similar process is likely to occur again as early as mid-February.

The pros to this deal were very limited, but fundamental enough in nature to justify significant near-term optimism:

- **Limited Tax Hikes -** Marginal tax rates will rise for only a small percentage of taxpayers – although the payroll tax holiday will end for all.
- **Recession Likely Averted -** Risk of fiscal induced recession in 2013 has been significantly reduced as the magnitude of near-term fiscal tightening has been limited to a manageable level.

However, the deal did remove major near term fiscal consolidation and should avert a self-inflicted US recession

These two items alone should be enough to significantly reduce the negative economic tail risks and justify the strong response in risk assets and the 10bp+ rise in 10yr Treasury yields from the morning of New Year's Eve until just prior to the release of the Fed minutes on January 3. We think that this is likely to set more of a risk-on tone for the next several weeks – despite the temporary interruption due to concerns about QE raised by the Fed minutes.

On to the Next One

The debt ceiling looms again later on this quarter

However, this positive tone does risk interruption from the debt ceiling which could strike as early as mid-February. While we have less concern about a breach of the debt ceiling than we did about a breach of the fiscal cliff, the potential consequences for the Treasury market could be even higher. The combination of a Republican legislature wanting a payback for the revenue-spending ratio of this week's deal and a Democratic constituency that may be less concerned about a Treasury default than it was about its taxes going up are likely to be a recipe for another last second showdown. However, investors are used to this and we believe unlikely to consider this until the very last minute – so we see it as far too early to position based on debt ceiling concerns. We discuss this topic in greater detail later in this document.

US Sovereign Rating Concerns

Additional rating agency actions are likely on the US sovereign absent positive developments in the next few months

Implicit in the cons that we raised about the current deal is the increased risk that US risk of another sovereign downgrade has moved higher. Both Moody's and S&P noted that nothing in this week's agreement did anything to improve the medium term fiscal situation of the US. This is one reason that both have the US on negative outlook. Further, the fact that the agreement was not reached until just after year-end and did not address the debt ceiling (or continuing resolution) are unlikely to convince the rating agencies that the political dysfunction in the US has improved – this was a significant factor noted by S&P when it downgraded the US in August 2011.

It seems likely that if no additional deficit reduction is achieved in the deals that are struck to address the debt ceiling and the continuing resolution, a downgrade by one or more rating agencies is very likely in the aftermath. A modest amount of additional reduction is likely to forestall a downgrade for 2013 – assuming the reduction is judged to be permanent and not something likely to be reversed by the next Congress. However, it is unlikely that the US will make it through 2014 without a downgrade absent a deal more similar to the grand bargains that have been recently discussed, yet never considered by Congress.

Risks to a Rally in a Bear Market & 5yr – 30yr Steepeners

We would consider both the debt ceiling and sovereign ratings as significant tail risks that would cause flight-to-quality rallies in the Treasury market. However, our base assumption is that the US Treasury market is in the early stages of a bear market and we expect 10yr Treasury yields to move 50-75bp higher over the course of 2013. However, with these tail risks in place, we would not yet recommend a short duration position – especially after the recent rise in yields. For the time being we think that a 5yr – 30yr curve steepener (70% beta weighted) is a better way to position for a slowly improving US economy and a Fed that is likely to be on hold for another couple years. While the reward will not be as great if rates were to quickly gap higher, the carry makes it a better core trade in an environment where Treasury yields have been range-bound for vast stretches of time.

TIPS: An exciting start to 2013

Jabaz Mathai

The new year has started in an aggressive "risk on" mode, with both breakevens and real yields rising. The FOMC minutes reveal a Fed that is more sensitive to the size of its balance sheet than the market expected. This should keep longer end inflation expectations capped. However, we think that investors in front end TIPS will be rewarded over the next two to three months, despite the near term negative carry.

Clear skies ahead?

With the eleventh hour stop gap fiscal agreement, the worst case scenario of a fiscal contraction has been avoided. Although uncertainty remains around the temporarily postponed sequester cuts, and the lifting of the debt ceiling, the "risk on" trade could continue in the near term. A confluence of reasonably positive economic data (ISM manufacturing, trend in jobless claims, vehicle sales, housing) indicates that the uncertainty surrounding the fiscal cliff has not affected sentiment yet.

Additionally, global sentiment has improved. In Europe, peripheral spreads continue to tighten as the ECB, in Draghi's words[1], reduces the tail risk of a disruption in the euro zone. Political changes in Japan and China have the potential to create additional policy stimulus there in the near term. One historically reliable indicator of global risk appetite – the JPY, has been indicating an underlying shift in sentiment since October. Historically, the JPY has tended to sell off with an increase in risk appetite. We looked at the largest monthly sell offs in the yen vs. the dollar over the last twelve years and the corresponding changes in 10y yields. As shown in Figure 4, these sell-offs have historically been associated with rising Treasury yields. Prior to last month, the most recent instance of a large sell off in the yen was in February 2012, when the JPY sold off by 6.4%.

Figure 4. Historically, selloffs in JPY have coincided with (or sometimes led) higher real and nominal yields

	JPY	10y
2/27/2009	8.5%	17
12/31/2009	7.7%	64
3/30/2001	7.6%	2
12/31/2001	6.6%	30
2/29/2012	6.4%	17
12/31/2012	6.2%	14
4/30/2004	6.0%	67
4/28/2000	5.3%	21
3/31/2010	5.1%	21
1/31/2000	4.7%	22
6/29/2001	4.5%	3
4/30/2008	4.2%	32
11/30/2010	4.1%	20

Source: Citi Research, Bloomberg. Changes in USD/JPY: +ve sign indicates dollar appreciation vs. yen. Changes in 10y yields in bp.

The increase in risk appetite is positive for breakevens, especially in the front end of the curve. We like the 1y to 5y part of the breakeven curve, which should outperform as the market becomes less concerned with tail risks emanating from Europe or a global growth slowdown. While carry is negative in the near term, we would still recommend that investors accumulate front end TIPS to position for outperformance over a two- to three-month period.

Note that while we think that real rates in the long end are at risk to move higher in 2013, the 30bp sell off in 30y real yields from the FOMC announcement to today is likely to put the brakes on real yields for now. We took profits on our long payer swaption trade earlier today (see "Take profit on payer swaption trade").

FOMC minutes show uncertainty about QE duration

Perhaps of equal importance to inflation markets as the fiscal cliff agreement was the release of the FOMC minutes yesterday. The December FOMC minutes show some uncertainty regarding the duration of the current asset purchase program. Specifically, the minutes stated that "several (members) thoughts that it would probably be appropriate to slow or to stop purchases well before the end of 2013, citing concerns about financial stability or the size of the balance sheet". After the FOMC minutes were released, real yields rose, while breakevens tightened. This makes sense in the light of the Fed's sensitivity to balance sheet size evidenced in the minutes.

Both the minutes and the immediate response of breakevens further reinforce our belief that breakevens in the longer end of the curve (10y and out) have very little upside from current levels. This is because inflation risk premium in the longer end

[1] Draghi's interview with in the Financial Times, Dec 14, 2012: ".... (2012 is) the year when the ECB has stepped in to remove tail risks."

should be contained as the Fed communicates its inflation sensitivity. The best way to express this in our view is either via shorting 5y forward 5y inflation or by 2s10s breakeven curve flatteners – we have both these trades in our recommended portfolio.

Debt Ceiling Deja Vu

US Hit Debt Ceiling on December 31

Andrew Hollenhorst
Brett Rose

On December 31, 2012 the Treasury reached its statutory debt limit of $16,394 billion. In a December 26 letter, Treasury Secretary Geithner advised Congress that extraordinary measures can open up about $200 billion in headroom. According to our estimates, this headroom will likely last until mid-February, with the ceiling most likely to bind on or in the week or two after February 15.

While President Obama has stated that he refuses to negotiate with Republicans on a debt limit increase, a number of Republican lawmakers have given notice that a debt limit extension will only be forthcoming in return for structural reform of entitlement programs. In our view this makes a confrontation over the debt ceiling a real possibility. The uncertainty surrounding the debt limit increase is only heightened by the fact that spending cuts due to “sequestration” are now scheduled to go into effect on March 1, and a continuing resolution required to avoid a government shutdown is due March 27.

Figure 5. Key fiscal policy dates

Event	Date
Debt Ceiling	Feb. 20 (Forecast)
Sequester Cuts	Mar. 1
Continuing Resolution Expires	Mar. 27

Source: Citi Research

Extraordinary measures

To generate headroom, the Treasury will engage in a series of accounting maneuvers to transfer liabilities out of securities that count against the statutory debt limit. These maneuvers for the most part involve redeeming Treasury securities held by retirement funds for Federal employees or declining to reinvest proceeds from maturing securities held by these funds.

1. CSRDF and PSHRBF – The Civil Service Retirement and Disability Fund (CSRDF) provides benefits to retired and disabled Federal employees and is invested in Treasury securities that count against the debt limit. While the statutory debt limit is binding, the Treasury may redeem an amount of securities equal to the value of payments it is authorized to make out of the CSRDF. The Treasury estimates this is worth $12 billion. Additionally, the Treasury can decline to invest new contributions which are estimated to generate an additional $4 billion in headroom and need not reinvest $16 billion in interest that was paid on Dec. 31. Similar to the CSRDF, the Treasury can decline to reinvest the Dec. 31 interest payment to the Postal Retirees Health Benefit Fund (PSRHBF) which is estimated to be worth $1 billion.

2. G-fund – The Government Securities Investment Fund (G Fund) is a money-market retirement fund in which federal employees can invest. The fund invests in special-issue Treasury securities that have one day maturities and pay an interest rate based on the weighted average yield of all Treasuries with maturities of 4 or more years. By declining to reinvest these securities the Treasury estimates it can generate $156 billion in headroom.

3. ESF – The Exchange Stabilization Fund (ESF), which can be used to buy and sell foreign currencies, is invested in special-issue Treasuries which are reinvested daily. Similar to the G-fund, declining to reinvest the maturing securities is estimated to generate $23 billion in headroom.

Figure 6. Treasury can generate around $200 billion of headroom under debt ceiling

Maneuvers to Increase Debt Headroom	Headroom ($bn)
CSRDF Redemption	12
CSRDF Contributions	4
CSRDF Interest	16
PSHRBF Interest	1
G-Fund Matures	156
ESF Redemption	23
Total	**212**

Source: Citi Research, Dec. 26 Letter from Secretary Geithner to Congress

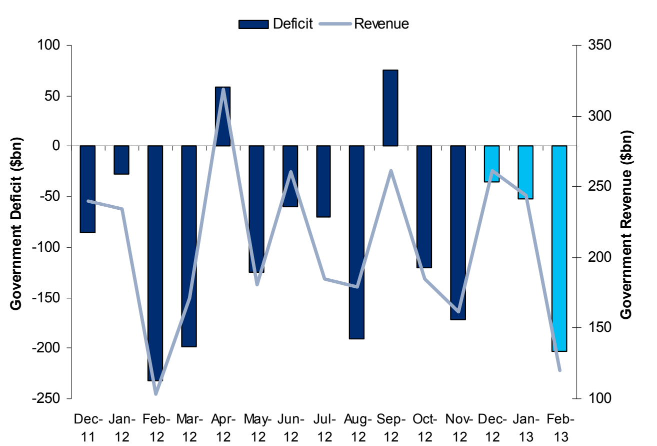
Room likely to run out in mid to late Feb

Making use of extraordinary measures, the Treasury has estimated it can operate for “about 2 months” based on $200 billion in headroom and average monthly deficits of about $100 billion. The strong seasonal pattern in government deficits gives us some additional guidance and in our view makes it likely that the debt ceiling will bind in the second half of February.

Budget deficits tend to be relatively small in January, whereas they are much larger in February. This is driven by the seasonal pattern of tax revenue with income tax revenue much higher in January than February. (Figure 7) Consistent with the historical experience, we are forecasting a budget deficit of about $50 billion in January and about $200 billion in February. Since the net outlays are concentrated in February we think the hard ceiling will be reached toward the latter half of the month. A large interest payment is due on February 15, making that a potential date for the Treasury to exhaust its headroom. Another key date where the ceiling may bind is February 20, when a Social Security benefit payment is scheduled.

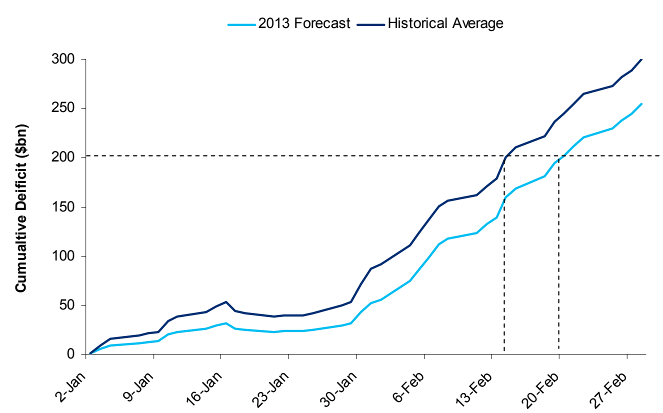
Based on average daily deficits over the last 4 years, the Treasury would exhaust its spending authority on Feb. 15. (Figure 8) However, we are forecasting slightly smaller deficits in 2013 and as such our baseline estimate has the Treasury running out of debt authority on February 20.

Figure 7. Low revenue and large deficits in February…



Source: Citi Research, US Treasury, Haver, Dec 2012 – Feb 2013 are forecasts based on seasonal patterns in revenue and outlays with adjustments made for changes in policy.

Figure 8. …make Treasury likely to hit hard ceiling in mid to late Feb.



Source: Citi Research, Forecast assumes our forecast deficits for the months of Jan. and Feb. with the deficits distributed across the days of the month as they have been on average over the last 4 years of data.

What could extend the deadline?

This outlook could change materially due to unforeseen cashflows, changes in Treasury policy or legislation providing temporary debt ceiling relief. For instance, in anticipation of possible changes to tax law the IRS could delay accepting tax filings and paying out tax returns. This is significant as the US Treasury paid out $257 billion in income tax returns in February 2012. It is also possible that legislators would give the Treasury temporary authority to issue a small amount of debt to meet an upcoming outflow like a Social Security payment. This type of legislation was enacted in March of 1996. While asset sales remain a theoretical method of staving off the ceiling, the Treasury Secretary explicitly ruled out such an approach in his letter to Congress.

Figure 9. Treasury has ruled out selling its close to $700 billion in available assets

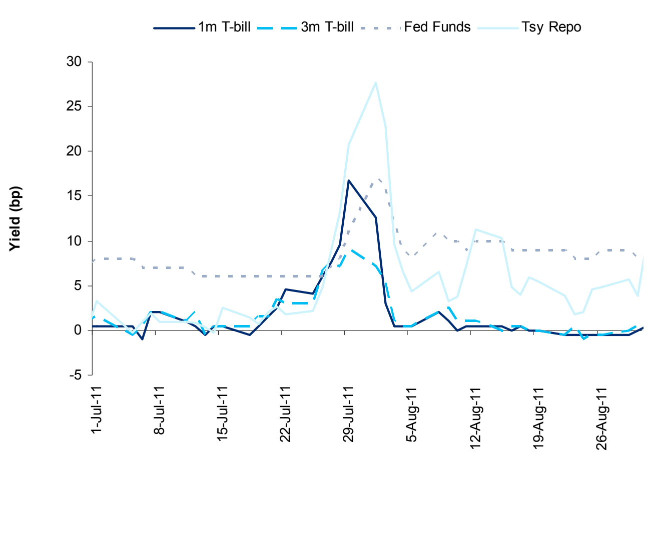
	Holdings ($bn)
Student Loans	654
MBS	4
GM Stock	9
Other TARP	17
Gold	11
Total	**695**

Source: Citi Research, US Treasury, Wall Street Journal

Effect on short-term markets

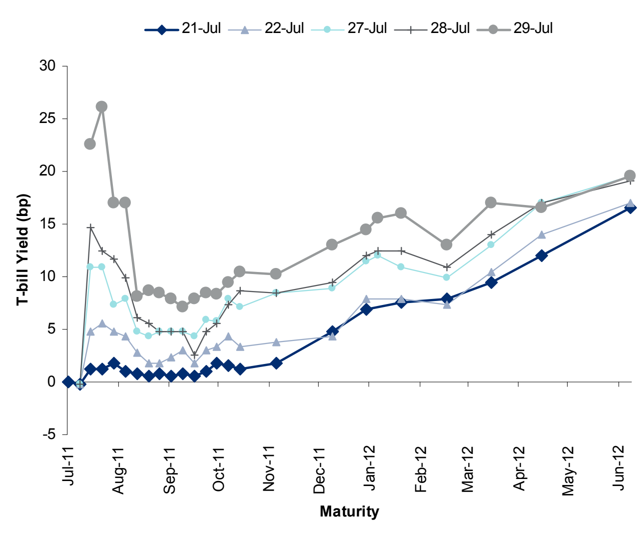
Short-term markets reacted dramatically to the debt ceiling showdown of July 2011. Repo, fed funds effective, and front-end T-bill rates all spiked higher. (Figure 10) However these dislocations did not show up until a few days before the Treasury ran out of headroom which it projected would happen August 2, 2011. While the dynamics of a possible 2013 showdown would likely be similar, we would caution that investors, conditioned by the 2011 experience, may begin backing away from late Feb and early March T-bills before a true debt ceiling crisis materializes. While bill yields of all maturities moved higher during the 2011 crisis, those within 1 month of the hard ceiling date were most impacted, and we recommend short maturity investors extend to at least April maturities, or stay invested in bills maturing before Feb. 14, looking to reinvest at potentially higher yields on debt ceiling concerns. (Figure 11) For those with more ability to extend duration we continue to recommend T-bills with 6m or longer to maturity.

Figure 10. Front-end rates spiked in days before 2011 debt ceiling



Source: Citi Research, Bloomberg

Figure 11. Bill yields within 1m of ceiling most impacted in 2011



Source: Citi Research, Bloomberg

Interest Rate Derivatives

Neela Gollapudi

Figure 12. Vol changes 12/27-1/3 (bp/annum)

	2y	5y	10y	30y
1m	1.8	7.2	10.1	11.2
3m	0.0	3.3	3.7	3.1
1y	0.6	3.2	2.0	1.6
2y	1.9	2.5	1.5	0.2
5y	2.4	1.9	0.9	0.1
10y	0.7	0.4	-0.1	-0.7

Source: Citi Research

Market Recap

Over the past several days, implied vol rose in short expiries as 10y Treasury yields climbed about 25bp in five trading sessions. Despite the sharpness of the headline increase, normalized vol has only slightly outperformed skew. During the initial part of the move, there was a tendency on the part of market participants to fade the rate move by selling gamma. Flows in gamma have been mixed, with greater buying flows as we broke the range in the high 1.80s in cash 10s.

Fiscal cliff and swap spreads

We have an outstanding recommendation to enter 10y swap spread wideners at 4.5bp, with a horizon going into mid-March. The premise of the trade is that fiscal negotiations will turn contentious, with a flight-to-quality bid for Treasuries. We also suggested reassessing the trade at the start of January in view of issuance seasonals. We have also indicated that swap spreads in 10y and longer tenors will tighten, owing to the implementation of Dodd-Frank and the gradual reduction of GSE portfolios, after all the fiscal issues are resolved sometime in March 2013.

10y swap spreads have tightened by almost 3.5bp from 2012 closing levels in the first three trading sessions of 2013. This came a) in part due to a sharp increase in Treasury yields on a partial resolution of the fiscal negotiations, b) in part due to a 0.5bp decline in Libor, and c) in part due to the seasonal pickup in issuance in January. Our credit strategists expect gross investment-grade issuance of about $80-100bn this month. The average investment-grade January issuance is about $86bn counting from the year 2000, and about $113bn over the past five years. Therefore issuance of between $80bn and $100bn this January is not out of the ordinary, and is in fact a little less than it has been in the recent past. Secondly, the average tightening of 10y swap spreads in January over the past five years (excluding 2013) is about 3.6bp. Therefore, the tightening we already saw so far this year is close to the average for the full month of tightening for January (10y spreads were at their trough of 2.75bp on Thursday vs 6.25bp at end of year). Therefore it is likely that there is no material further tightening in 10y swap spreads on account of issuance. Finally, while an agreement on the expiring tax cuts has been reached, seemingly anti-climactically, we expect the remaining political negotiations to occur on relatively more neutral ground. Therefore we expect agreement on the remaining issues to be harder to come by, and in that environment, continue to favor swap spread wideners in the 10y sector. Our trade recommendation called for a target of +15bp on 10y swap spreads with a “negative 1bp” stop loss. While we would retain the same stop loss, we would bring our profit target closer to +10bp, as the first phase of fiscal negotiations were resolved less contentiously than we had expected, and are behind us.

Implied Volatility and Uncertainty

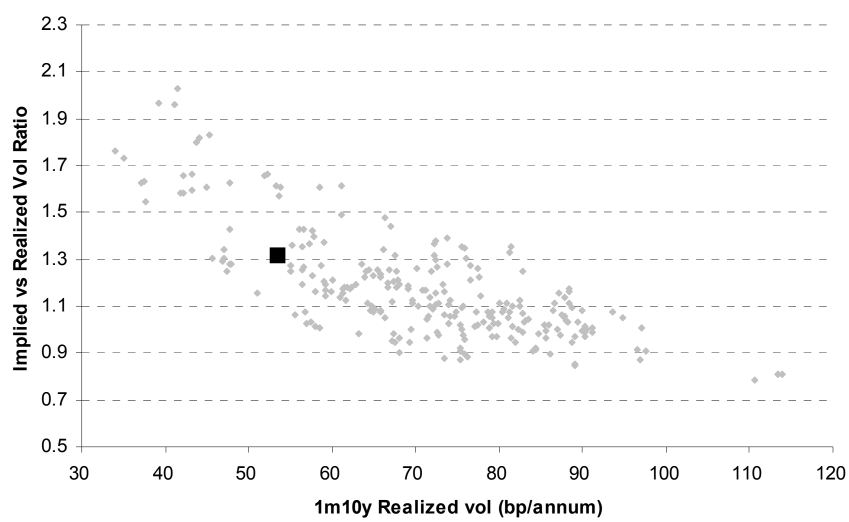
Some in the market would argue that the uncertainty inherent in the fiscal climate has been reduced[2] given the deal reached between the Republican House and the

[2] We slightly disagree with this view. We think that what has been agreed upon is for the most part what would have been agreed upon in a final agreement. Therefore we think the reduction of uncertainty is modest at best.

Democratic administration / Senate at the last minute. Yet implied volatility has increased since the start of the year, especially in shorter expiries and longer tails, as we can see from the table in the market recap section. This is interesting.

On the surface, a simple answer is that realized vol has increased, and therefore implieds should increase as well. This is not a fully satisfying answer, in our view, although we believe there is validity to the argument. We report the relationship between realized vol and implied vs realized ratio figure below.

Figure 13. Implied vol appears *fair* given realized vol.



Source: Citi Research

The above figure suggests that even though an implied vs realized ratio appears modestly high at 1.3 on an outright basis, it is *fair* given the level of realized vol. The extra 30% premium exists to account for the fact that even though realized vol is low, the frequency of tail events has likely not declined. Indeed for the past month, the implied/realized ratio for 1m10y has averaged about 1.36, and delta-hedged returns (as a percentage of option premium) on short 1m10y gamma positions have averaged close to zero, and were actually negative over more recent intervals. Long-term average returns on 1m10y are actually positive, suggesting that over the past month, an implied-vs.-realized ratio of 1.36 did not price-in a sufficient degree of risk premium.

The instinct is to be short gamma. The evidence from the past month goes against such an instinct. One can be short gamma under one of two circumstances:

- One could explicitly have a bullish rate view assuming the next phase of debt negotiations will turn contentious. In this case, realized vol will likely decline as rates gradually decline with mounting evidence of political dysfunction. Implied vs. realized ratios will also probably track lower than recent experience. This would result in positive returns to shorting gamma.

- Alternately, rates could stay at current levels, and simply trade in a tight range for the next two months. Under this scenario, short gamma positions could be profitable. One argument going for this view is that the market is lurching from one rate level to the next, and is being sticky at each rate level it reaches until a

new piece of information comes in. This has mostly worked with declining rates in the recent past.

We are explicitly neutral on rates. Therefore the first situation would not apply. While we could make a case for the second scenario, based on recent precedence, it is not a case we can make with much conviction, as we discuss below.

To take another look at what it means to have increasing implied volatilities with seemingly reduced uncertainty, consider the rates market dynamics over the past two years. We posit that that the rates market has gradually built up a significant amount of risk premium over the past two years, expressed as lower rates, either due to European concerns or due to US fiscal concerns. These two issues of concern have had the effect of making the distribution of interest-rates somewhat bi-modal. Once (if) the risk from these two issues is *cleanly* removed, the rates market has potentially a large distance to move. There is potentially a large amount of price discovery that needs to take place. In other words, even though the uncertainty from a tail event is removed, the uncertainty arising from consequential price discovery has increased after the partial agreement on taxes. We think this is the reason why implied vol has increased over the past week.

In the current environment, we are happy to stay neutral gamma vol. We have written in our 2013 annual outlook piece that we would have bearish views on intermediate vol (1y through 5y expiries) both due to the presence of ongoing QE, as well as the composition of QE. This view remains intact, all else equal.

US Agencies — Post Fiscal Cliff

Robert Rowe
Martin Bernstein
Rohit Thapliyal
Shuo Li
Vincent Toh

The US Congress passed a last-minute mini-deal to avert the fiscal cliff and US equity markets rejoiced with the Dow and S&P up 2.35% and 2.54% respectively. US Treasuries bear steepened, swap spreads tightened and agencies widened to swaps and were relatively unchanged to Treasuries.

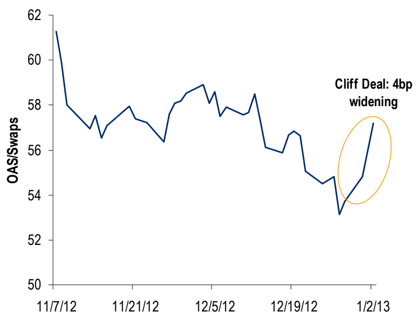
The deal to avert the fiscal cliff moved the automatic sequester (part of the 2011 Budget Control Act) from the end of December 2012 to the end of February 2013. As a result the US now faces a much larger and more complex political negotiation as the debt ceiling and sequester both remain unresolved creating a new deadline less than two months away. We believe that this next deal may be much harder to pull together than the mini-deal we just witnessed – and that one was a nail-biter.

Buy Long-Duration Bullets on Asset Swap - Recap

On November 7th, 2012 recommended that investors buy long-dated bullets on asset-swap as a positive-carry way to hedge against adverse outcomes in fiscal cliff negotiations (Post-Election US Agency Recommendation - Buy Long Duration Agency Bullets on Asset Swap).

- *Agency spreads to swaps are negatively correlated to swap spreads. Thus, they can outperform swaps when swap spreads widen, especially in more extreme moves.*
- *Additionally, the agencies are in wind-down mode and the longest bullet issuance that's been issued in the last few years has been one Freddie Mac 10-year deal. Continuing negative net issuance (-$236 billion in 2012) should dampen any potential spread widening.*

Figure 14. Old 30-yr Agency Spread to Swaps



Source: Citi Research

Now that the fiscal cliff deal has moved the automatic sequester to the end of February, right around the time that the US is projected to hit the debt ceiling, the potential impact of an adverse event may be larger. In addition, this may have complicated negotiations, which may make such an event more likely. Thus we reiterate our recommendation to buy longer-dated agencies on asset swap as a way to protect against adverse outcomes.

The trade has performed very well (Figure 15), with spreads trending tighter over the last two months. The trade is up even after yesterday's 4bp (Figure 14) widening in agency spreads in the wake of the fiscal cliff deal; agency spreads were unchanged to Treasuries but with swap-spreads tightening, agencies widened to swaps.

Figure 15. Buy Long Duration Bullets on Asset Swap - Performance Nov. 7th, 2012 to Date

	OAS/Swaps		Return Since Inception (%)		
	Current	11/7/2012	Carry	Spread	Total
10yr Agency Bullet	22	22	0.03	0.01	0.05
Old 30yr Agency Bullet	56	60	0.09	0.29	0.38

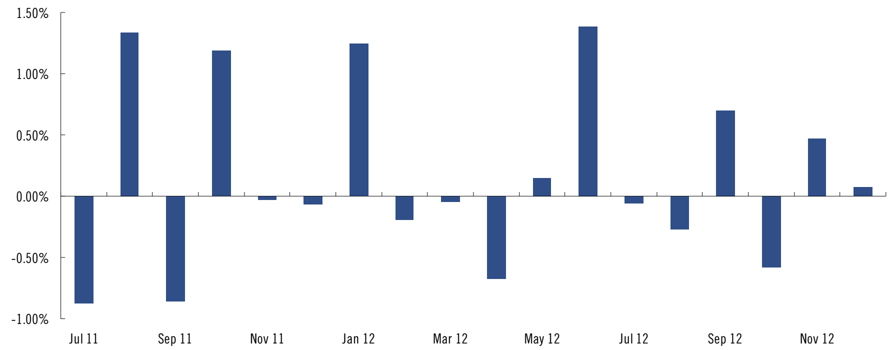
Source: Citi Research

US Rates Strategy Model Portfolio Update

Arjune Bose

The US Rates Strategy Model Portfolio is up 0.07% for the month of December. Figure 16 shows the monthly model portfolio returns since July 2011. Figure 17 shows the P&L from our outstanding trades, while Figure 18 shows all trades closed in 2013. Note that we have removed all trades from 2010. To see the older trades, please refer to a previous publication.

Figure 16. Monthly Returns for the US Rate Strategy Model Portfolio, July 2011-November 2012



Source: Citi Research

Outstanding Trade Recommendations

All closed trades since the beginning of 2013 are listed in the Appendix.[3]

Long 5y TIPS on a Breakeven Basis (Opened December 12, 2012, horizon 3 months; see Buy 5y TIPS on breakeven basis).

5s30s Beta-Weighted Steepener (Opened December 12, 2012, horizon 6 months; see Buy 5yr Sell 30yr Treasury).

10y Swap Spread Widener (Opened November 29, 2012, horizon 3 months; see Initiate 10y swap spread wideners).

Buy 1x2 in 6m10y with Tail Hedge (Opened November 16, 2012, horizon 6 months; see Buying the ratcheting rates scenario).

2s10s Breakevens Flattener (Opened October 26, 2012, horizon 1 month; see Entering a 2s10s breakeven curve flattener).

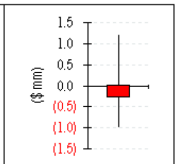
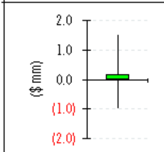
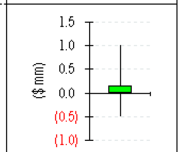
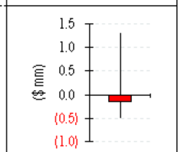
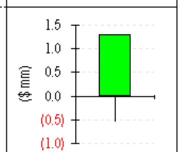
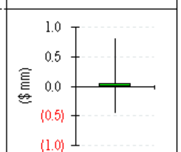
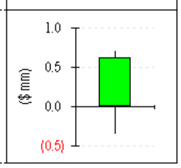
Sell 5y5y Forward Inflation Swaps (Opened October 3, 2012, horizon 3 months; see Sell 5y forward 5y inflation swap).

Buy 6m10y Swaption Straddles and Sell 3y10y Swaption Straddles (Opened September 14, 2012, horizon 3 months; see Sell 3y10y vol; Hedge with gamma weighted 6m10y vol.).

[3] For a detailed list of all closed trades from May 2006 to May 2007, please see "US Rate Strategy — Trade Closeout," *US Rate Strategy — Bond Market Roundup: Strategy*, Citi, May 11, 2007.

Figure 17. Summary of US Rate Strategy Model Portfolio Performance, January 4, 2013

US Rates Strategy Model Portfolio

INFLATION	**Long 5y TIPS on a Breakevens Basis**	Open	2.099%	*Dec 12, 2012*	
	Buy $50MM TII 0.125 4/15/17 TIPS @ 107.61	Current	2.090%	*3 Month(s)*	
	Sell $55MM T 3.125 4/17 TSY @ 111.19	**P&L**	(297)		
		Target	1,200		
		Stop	(1,000)		
RATES	**5s30s Beta-weighted Steepener**	Open	225 bp	*Dec 12, 2012*	
	Buy $285MM T 0.625 11/17 @ 99.92	Current		*6 Month(s)*	
	Sell $50MM T 2.75 11/42 @ 97.25	**P&L**	179		
		Target	1,500		
		Stop	(1,000)		
VOL	**10y Swap Spread Widener**	Open	4.5 bps	*Nov 29, 2012*	
	Pay $110MM 10y Fixed @ 1.66 %	Current	3.5 bps	*3 Month(s)*	
	Buy $100MM 10y Treasuries @ 1.615%	**P&L**	142		
		Target	1,000		
		Stop	(500)		
VOL	**Buy 1x2 in 6m10y with Tail Hedge**	Open		*Nov 15, 2012*	
	Buy $100MM 6m10y -25 Receiver	Current		*6 Month(s)*	
	Sell $200MM 6m10y -40 Receiver	**P&L**	(170)		
	Buy $100MM 6m10y -55 Receiver	Target	1,300	*range trade on fiscal cliff stall*	
		Stop	(500)		
INFLATION	**2s10s Breakevens Flattener Using TIPS**	Open	75 bps	*Oct 26, 2012*	
	Buy $225MM Jul14 TIPS @ 105.95	Current	61 bps	*2 Month(s)*	
	Sell $42MM Jul22 TIPS @ 108.48	**P&L**	1,287		
	Buy $23MM Jul22 TSY @ 99.09	Target	900	*short end inflation fell with oil futures, causing large steepening*	
		Stop	(550)		
	Buy $100MM 3m10y 25 Receiver				
INFLATION	**Sell 5y5y inflation swap**	Open	3.050%	*Oct 3, 2012*	
	Sell $50MM 5y5y Inflation Forward	Current	3.056%	*3 Month(s)*	
		P&L	42		
		Target	805		
		Stop	(460)		
VOL	**Sell 100mm 3y10y and buy 6m10y straddles**	Open	91.9 bps	*Sep 14, 2012*	
	Sell $100mm 3y10y Straddle	Current	88.67 bps	*3 Month(s)*	
	Buy $40mm 6m10y Straddle	**P&L**	617		
		Target	700		
		Stop	(350)		

	P&L ($000s)	Portfolio Return
Net P&L from Open Trades	1,800	0.60%
P&L from Closed Trades Year-to-Date	15	0.01%
Total P&L Year-to-Date	1,815	0.60%
Total P&L Since Portfolio Inception on May 11, 2007	124,741	41.58%

Source: Citi Research. (a) For a detailed list of all closed trades from May 2006 to May 2007, please see "US Rate Strategy — Trade Closeout," US Rate Strategy — Bond Market Roundup: Strategy, Citi, May 11, 2007. For a detailed list of all closed trades from May 2007 to May 2008, please see "US Rate Model Portfolio One-Year Anniversary Recap," US Rate Strategy — Bond Market Roundup: Strategy, Citi, May 30, 2008. Between May 2007 and May 2008, the group made a total of 87 trade recommendations, with 50 producing positive results, 36 negative, and one breaking even. This produced a 15.4% total return, with a 1.68 Sharpe ratio. Note: Return on risk is based on Citi's return-on-risk methodology and is calculated by taking the largest two-week change in the trade since January 1997. Return on portfolio based off $300 million model portfolio sizing.

Appendix: Model Portfolio Closed Trades

Figure 18. US Rate Strategy Closed Trades in 2013

	Inception Date	Unwind Date	Initial	Unwind	P&L ($000s)	Target P&L	Stop Loss	Risk Return	Portfolio Retur
Buy 3m10y and sell Nov6 10y 25 Receivers	Oct 12, 2012	Jan 2, 2013			($425)	1,000	425	-85%	-0.14%
Long 10y Treasuries	Nov 7, 2012	Jan 2, 2013	1.680%	0	($600)	2,000	1,300	-38%	-0.20%
2m30y Yield Payer Spread	Dec 11, 2012	Jan 4, 2013	1.680%	0	$1,040	1,300	500	-38%	0.34%
P/L from closed trades (YTD)					**$15**				**0.00%**
P/L from all closed trades (since 05/11/07)					**$122,942**				**40.98%**

Note: For trades before January 2013 please see *US Rates & Strategy 2013 Outlook*.

Source: Citi Research.

Appendix: Event Calendar

December 2012-January 2013

Monday	Tuesday	Wednesday	Thursday	Friday
31	**Jan 1** **New Years Day** **SIFMA Recommended Close** **US Government Holiday**	**2**	**3** Fed Purchase Operation $4.25-5.25 bln 2017 mty FOMC Minutes Ann 3-Yr. Note: $32.0B Ann 10-Yr. Note: $21.0B Ann 30-Yr. Bond: $13.0B	**4** Employment Nov / Dec Payrolls 161K / 155K Unemp. Rate 7.8% / 7.8% Avg. Hrly. Earn. 0.3% / 0.3% Priv. Wrkwk 34.4H / 34.5H Jan 5: Yellen on Monetary Policy
7 Fed Purchase Operation $1.25-1.75 bln 2036-42 mty	**8** Fed Purchase Operation $3.0-3.75 bln 2018-19 mty Lacker on Economic Outlook Auction 3-Yr. Note: $32.0B(E)	**9** Fed Purchase Operation $1.25-1.75 bln 2036-42 mty Auction 10-Yr. Note: $21.0B(E)	**10** Fed Purchase Operation $2.75-3.5 bln 2020-22 mty George on Economic Outlook Bullard on Economy Auction 30-Yr. Bond: $13.0B(E)	**11** Fed Purchase Operation $4.75-5.75 bln 2017-18 mty Plosser on Economic Outlook
14 Fed Purchase Operation $1.25-1.75 bln 2036-42 mty Lockhart on US Economy	**15** Fed Purchase Operation $0.75-1.0 bln 2023-31 mty	**16** Fed Purchase Operation $1.25-1.75 bln 2036-42 mty Consumer Price Index Total / ExF&E Nov -0.2% / 0.2% Beige Book	**17** Fed Purchase Operation $2.75-3.5 bln 2020-22 mty Ann 10-Yr. TIPS: $14.0B(E)	**18** Fed Purchase Operation $1.25-1.75 bln 2036-42 mty
21 **Martin Luther King Day** **SIFMA Recommended Close** **US Government Holiday**	**22** Fed Purchase Operation - TIPS $1.0-1.5 bln 2017-42 mty	**23** Fed Purchase Operation $1.25-1.75 bln 2036-42 mty	**24** Fed Purchase Operation $2.75-3.5 bln 2020-22 mty Ann 2-Yr. Note: $35.0B(E) Ann 5-Yr. Note: $35.0B(E) Ann 7-Yr. Note: $29.0B(E) Ann 10-Yr. TIPS: $14.0B(E)	**25** Fed Purchase Operation $3.0-3.75 bln 2018-19 mty

Other Notable Events

- FOMC: Jan. 29-30 (No summary of economic projections or press conference following this meeting)
- Debt Ceiling Binding: Mid- to Late February
- Congressional Continuing Resolution Expiration: March 27

Appendix A-1

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