21 November 2013 | 16 pages

Global

Fed Taper & Political Risk for Credit Spreads

Policy uncertainty could be a major tail risk in 2014

- **The once-strong correlation between US economic policy uncertainty and credit spreads broke down during QE** — We find that credit spreads are usually positively correlated to policy uncertainty, but easy monetary policy has created a disconnect in the post financial crisis period. We believe that the Fed taper (expected in 2014) will restore the traditional relationship between credit spreads and policy uncertainty.

- **With Fed tapering scheduled to begin early next year, policy uncertainty regains its role as an important risk factor** — Washington policy disputes have fallen into what is now a well-worn pattern over the past three years, which we call *Lather, Rinse, Repeat*. The end of the October government shutdown has not resolved the underlying issues in US budget politics, and this lurch from crisis to crisis will continue in 2014.

- **Investors are starting to pay attention** — This week's Bloomberg poll finds that investors believe that Washington gridlock poses the biggest risk to the global economy next year, even bigger than China or Europe.

- **We recommend low cost shorts to position for greater uncertainty** — Investors should position themselves using low carry shorts such as covered puts or index flatteners.

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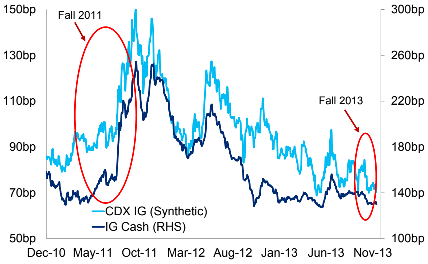
The Importance of Policy Uncertainty

Figure 1. Markets reaction to policy uncertainty in Fall 2011 versus Fall 2013.



Source: Markit, Yieldbook, Citi Research

Markets appear more and more desensitized to politics driven policy uncertainty. Witness the contrast between the market reaction in Fall 2011 versus Fall 2013 (see Figure 1). The mainstream thinking on US policy uncertainty going into 2014 is more like how we deal with a chronic disease; we have lived with it for so long that it does not bother us that much anymore.

Yet, looking at some of the most volatile market sessions since the beginning of quantitative easing, we find that at least half were triggered by political events in the US and abroad (see Figure 2). This includes the fiscal cliff, the US debt downgrade, and the October government shutdown. When Standard & Poor's downgraded the US in 2011, they explicitly based their call on the political situation in Washington.[1] Clearly, politics and policy uncertainty are not factors that markets can easily ignore.

We argue in this report that policy uncertainty does indeed have a long-term relationship with credit markets in particular, and that this relationship has recently been broken by the Fed QE operations. Therefore, it stands to reason that a combination of Fed tapering and heightened policy uncertainty in 2014 could be a major source of tail risk for investors. Increased liquidity is about to depart the scene, but the underlying structural political risks remain largely unchanged.

Figure 2. Since QE began, at least half (in gray) the top ten most volatile market sessions have been in response to political events.

Since QE1 (September 2008)

Date	Daily Move VIX %	Daily Move S&P %	Political Event	Non-Political Event
2/25/2013	38.7%	-1.83%	Italian election produces hung parliament	
4/15/2013	31.6%	-2.30%		Boston Marathon bombing
8/8/2011	30.1%	-6.59%	U.S. debt downgrade	
8/4/2011	28.9%	-4.77%		ECB, BoJ actions, slowdown fears
5/6/2010	26.7%	-3.11%		Flash crash
4/27/2010	25.8%	-2.17%		Greece downgrade
1/28/2011	25.7%	-1.79%	Tahrir Square in Egypt	Japan debt downgrade
5/7/2010	25.0%	-1.43%	U.K. election produces rare coalition gov't, Greece riots	
10/30/2009	23.9%	-2.74%		Rally slows, correction after soft week
1/22/2010	22.6%	-2.13%	Worries on Obama bank plan, Bernanke reappointment	China lending curbs

Since QE3 (September 2012)

Date	Daily Move VIX %	Daily Move S&P %	Political Event	Non-Political Event
2/25/2013	38.7%	-1.83%	Italian election produces hung parliament	
4/15/2013	31.6%	-2.30%		Boston Marathon bombing
2/20/2013	19.2%	-1.24%		Fed communication
10/19/2012	14.4%	-1.66%		Eurozone bank supervision, weak earnings
10/15/2013	13.7%	-0.65%	Government shutdown deal fails	
6/12/2013	12.6%	-1.07%		Fed tapering worries
4/3/2013	12.3%	-1.05%	North Korea threatens war	
12/28/2012	11.8%	-1.10%	Fiscal cliff	
6/20/2013	11.4%	-2.24%		Fed tapering worries
3/19/2013	10.4%	-0.24%	Cyprus crisis	

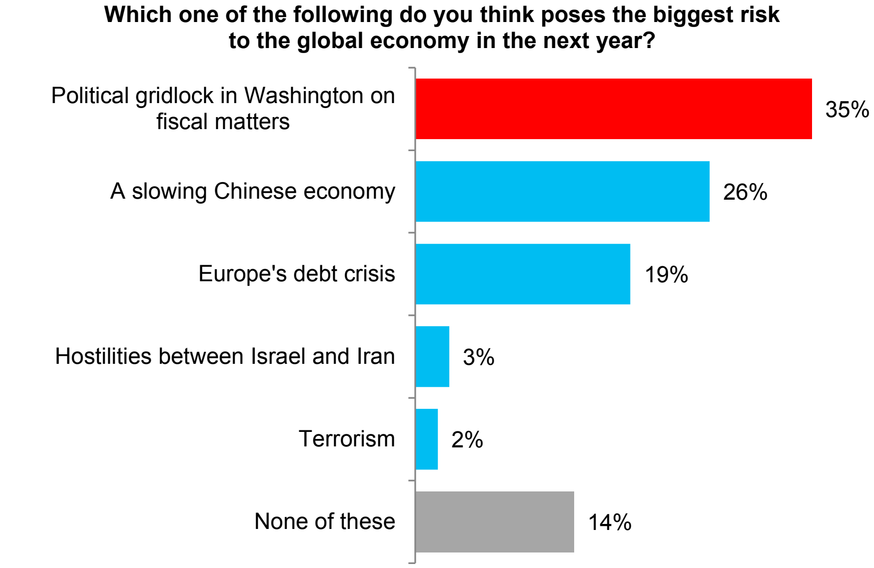
Source: News sourced from daily market recaps provided by AP and CNN Money.com, Citi Research

Such views are also gaining currency among market participants. This week's Bloomberg poll (see Figure 4) finds that investors believe that Washington gridlock poses the biggest risk to the global economy next year, even bigger than China or Europe. In addition, BlackRock CEO Larry Fink, speaking at the annual DealBook

[1] Standard & Poor's. "United States of America Long-Term Rating Lowered To 'AA+' Due To Political Risks, Rising Debt Burden; Outlook Negative." August 5, 2011. The exact text was: "[We] have changed our view of the difficulties in bridging the gulf between the political parties over fiscal policy, which makes us pessimistic about the capacity of Congress and the Administration to be able to leverage their agreement this week into a broader fiscal consolidation plan that stabilizes the government's debt dynamics any time soon."

conference last week, remarked that stocks could face double-digit corrections due to political risk in the DM economies, including the US.[2]

Figure 3. Washington policy uncertainty is the top worry of market participants



Source: Citi Research. Bloomberg poll of 750 customers conducted November 19, 2013, margin of error +/- 3.6%.

So what about the timing? In its October minutes, FOMC members said they expect economic conditions to improve enough to start "trimming the pace of purchases in coming months."[3] Citi US Economists suggest a timing of spring 2014:

> "We retained a relatively flat probability distribution of a 20% chance of tapering in December, 25% in January and 35% in March on the view that the payroll numbers over this stretch were suspect. While that judgment now seems validated by [November] data, there may still be some reluctance to move ahead with tapering as early as the December meeting." [4]

[2] Alexis Leondis and Saijel Kishan. "Fink Sees Equities Returning 7% as Dalio Expects 4% Gains." *Bloomberg BusinessNews*. November 12, 2013.

[3] Minutes of the FOMC, October 29-30, 2013.

[4] Robert DiClemente. "The Not-So-Surprising Jobs Surprise." Citi Research. November 8, 2013.

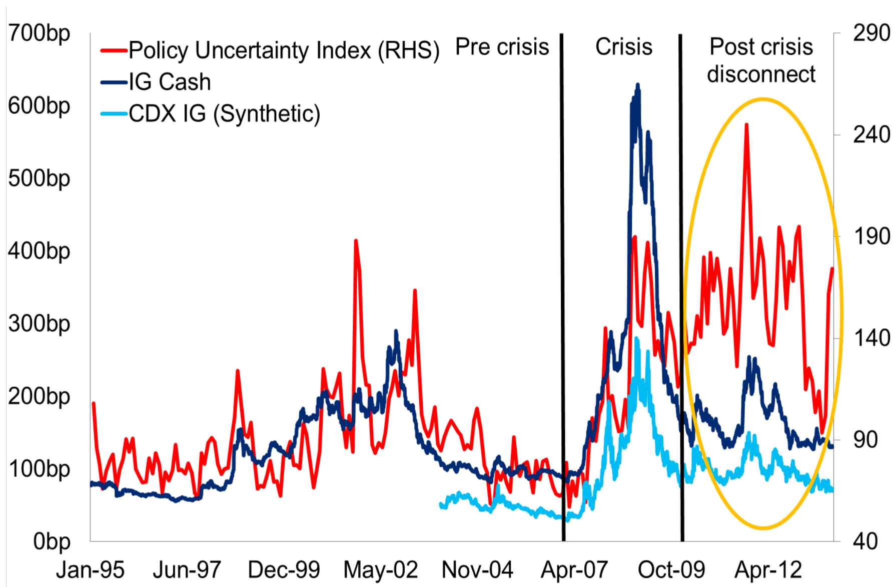
How Policy Uncertainty Affects Spreads

So how do we think policy uncertainty might affect credit markets? To understand that, let us look at past history and examine how policy uncertainty has influenced credit spreads. We use the Baker-Bloom-Davis Economic Policy Uncertainty Index[5] (EPU index) as a proxy for the policy uncertainty factor.

According to the authors, this index has 3 components. The first component refers to the frequency of references to economic policy uncertainty in the press, as represented by 10 US newspapers. The second component is how much economic forecasters disagree on future inflation and government expenditures. The third and final component is how many federal tax code provisions are set to expire going forward, and their impact on government revenues.

We show a plot of the EPU index together with CDX IG spreads (synthetic credit) and the Citi Broad Investment Grade (BIG) Corporate Index spreads (cash credit). We find that the relationship between credit spreads and the EPU index can be divided into 3 distinct regimes – pre-crisis, crisis, and post-crisis (see Figure 5).

Figure 4. Relationship between credit spreads (cash and synthetic) and the monthly Baker-Bloom-Davis policy uncertainty index.



Source: Markit, Yieldbook, Scott Baker, Nicholas Bloom and Steven J. Davis at www.PolicyUncertainty.com, Citi Research

Figure 5. Correlations and R-square values for IG cash spreads versus EPU index.

Period	Correlation	Regression Rsq
Pre-Crisis	63%	40%
Crisis	82%	67%
Post-Crisis	46%	19%

Source: Markit, Citi Research

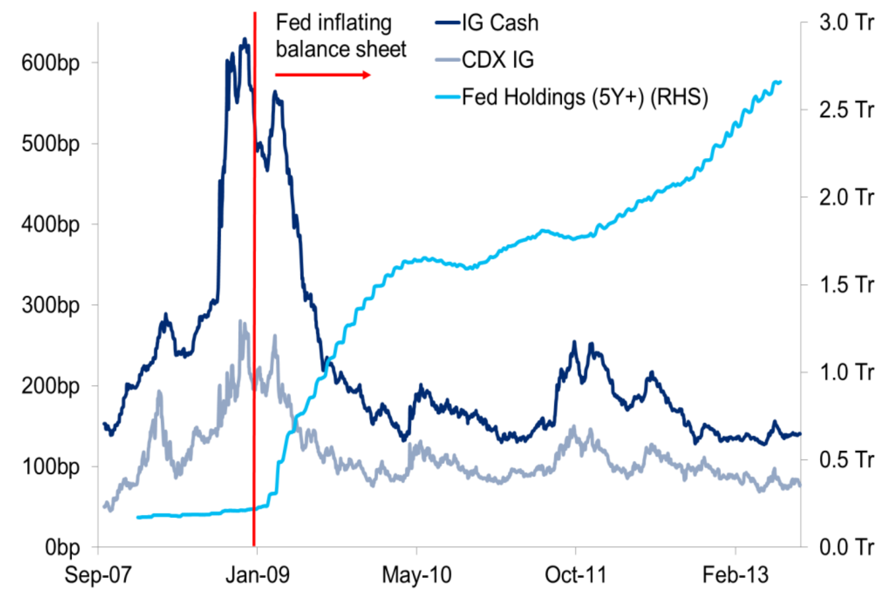
The one thing that stands out from the three regimes is the disconnect between policy uncertainty and credit spreads pre- and post-crisis. Taking cash credit spreads as an example (see Figure 6), we note that the regression between cash spreads and the policy uncertainty index has a much stronger relationship pre-crisis compared to post-crisis (twice the R-squared). We observe a similar effect (though less muted, most likely because of less data for the pre-crisis period) for synthetic credit spreads. In other words, credit markets used to be responsive to policy uncertainty in the pre-crisis days, but that is no longer the case.

Why did this happen? We believe that the disconnect has been mainly driven by the extra-ordinary monetary stimulus from the Fed. As we have argued elsewhere (see

[5] See S.R. Baker, N. Bloom, and S. J. Davis. Measuring Economic Policy Uncertainty. Available from http://www.policyuncertainty.com.

The Credit Index Call - Are Markets Too Complacent?), repeated injections of liquidity by the Fed has kept a lid on spreads and volatility in credit markets (see Figure 7). Therefore, in the post-crisis era, the link between credit spreads and policy uncertainty has definitely been tenuous.

Figure 6. The Fed has kept a lid on credit spreads post crisis by inflating its balance sheet.



Source: Markit, Yieldbook, Fed Reserve, Citi Research

However, the accommodative stance of the Fed on monetary policy is likely to change next year. Our economists expect the Fed to start reducing the pace of purchases (tapering) in March 2014 and end QE3 by September 2014, subject to economic data satisfying certain threshold conditions (see What Are Central Banks Thinking? – Our Chartpack for the Global Economy). Even the recent Fed minutes indicate that tapering views are gaining currency in the FOMC (see discussion in the previous section).

If that were to occur, it is our view that a high level of policy uncertainty would be a major driver of tail risk, especially because the absence of monetary accommodation will magnify the effects of fiscal drag on the US economy. In the next section, we describe why we believe that policy uncertainty is likely to remain elevated in 2014.

The Political Cycle of *Lather, Rinse, Repeat* Means Uncertainty Likely to Continue

With Congress controlled by rival political parties, brinkmanship dominates the policy discussion in Washington. Policy uncertainty has remained high, but markets seem to ignore it. During the October government shutdown, the absence of any significant correction surprised both policymakers and some market commentators. Ironically, the very lack of market pressure has removed a key catalyst to force policymakers to act.

Figure 7. The upcoming debate marks the fifteenth Continuing Resolution (CR) fight in three years

P.L. 112-4	March 2, 2011	
P.L. 112-6	March 18, 2011	
P.L. 112-8	April 9, 2011	
P.L. 112-10	April 15, 2011	
P.L. 112-25	August 2, 2011	Budget Control Act
P.L. 112-33	September 30, 2011	
P.L. 112-36	October 5, 2011	
P.L. 112-55	November 18, 2011	
P.L. 112-67	December 16, 2011	
P.L. 112-68	December 17, 2011	
P.L. 112-175	September 28, 2012	
P.L. 112-240	January 2, 2013	Fiscal Cliff Bill
P.L. 113-6	March 26, 2013	
P.L. 113-46	October 18, 2013	October shutdown
??	January 15, 2014	

Source: Congressional Research Service, Citi Research

We don't see any lessening of US policy uncertainty, at least within a twelve-month time horizon. Washington's problems have structural roots. Partisan polarization and long-term demographic shifts in the US have created a framework where Members of Congress have more to fear from primaries within their own parties than from general election opponents. This trend is also a function of broader public opinion in the electorate. For example, an October survey by Pew found majorities in *both parties* opposed to any compromise to end the government shutdown.[6] Consequently, even moderates in both parties feel pressure to avoid compromise.

Because of this, Washington policy disputes have fallen into what is now a well-worn pattern. Most observers remember the August 2011 debt ceiling agreement or the fiscal cliff deal. But as noted, there have actually been fourteen short-term budget deals over the past three years (see Figure 8). That's an average of one every four months. We call this cycle *Lather, Rinse, Repeat* on account of the heated rhetoric. As Congress moves from crisis to crisis, just-in-time agreements have become the rule.[7] Any deal is short in duration and minimalist in policy scope, often extending current law without addressing deeper fiscal questions.

The next budget fight is already scheduled. The October agreement to end the shutdown funded the government through January 15 and extends the debt ceiling through February 7. The January date will coincide with the timing of sequestration for FY2014, thereby centering the next fight on this bone of contention between Democrats and Republicans. Democrats would like to do away with sequestration, to be paid for by closing a set of deductions that they call tax loopholes, but are reluctant to tackle entitlement spending. Republicans would like to reform entitlement programs as part of a deal, and oppose raising taxes. These positions are difficult to reconcile, which is why we're not optimistic about a December budget deal.

Figure 8. The next budget showdown in January 2014: signposts

December 13	**"Son of Supercommittee" budget panel report due**
January 15	**Deadline for Continuing Resolution to fund government**
February 7	**Debt ceiling extension expires**
October 1	**New fiscal year begins**
November 4	**US midterm elections**

Source: Citi Research

The latest Continuing Resolution funds the government at $988 billion, around $20 billion above the $967 budget cap level. This is less than last fiscal year's $85 billion, but as this year's sequestration falls harder on government contractors especially in the defense sector, it may have a bigger impact on corporates.

Because of these short-term windows and the beginning of the next fiscal year in October 2014, we expect 2-3 more occasions of the cycle before midterm elections in November 2014. Until one party controls both the House and the Senate, whether it be Democrats or Republicans, the same players will retain their positions and be subject to the same pressures from their constituencies to avoid compromise.

[6] Pew Research Center poll of 1,000 adults conducted October 3-6, 2013, margin of error +/-3.7%.

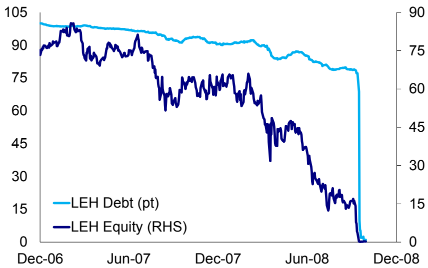
[7] For our overview of US budget politics and data on recent government shutdowns & debt ceiling fights, see Tina Fordham, Matt Dabrowski et al. "U.S. Political Risk Outlook: Autumn Budget Battles and the Next Fed Chair." Citi Research. August 1, 2013. "Close Shave? Proposed Six-Week Debt Ceiling Extension Buys Time, But US Political Volatility Continues." October 10, 2013.

How Investors Should Position

Investing in options is not suitable for all investors. Please see the disclosures concerning the risks of investing in options below and discuss with your Financial Advisor whether this particular options strategy is suitable for you. Note that all option prices are indications, based on intraday prices as of 21 November 2013, unless otherwise indicated. Interested investors should contact our trading desk for updated price and liquidity information. Also, complex option strategies may entail higher commissions costs.

The problem with a view that points to increasing policy uncertainty as a major tail risk factor is that it is very difficult to time the sequence of events that actually lead to a large market move. In credit, this is especially true because of the non-linear nature of credit markets (see Figure 10 for an example). In other words, credit markets may not always move in response to elevated risk factors (or events) till the very last minute when there is a large gapping move.

Figure 9. Credit behaves non-linearly in a market selloff, unlike equity, as we saw during the Lehman bankruptcy.



Source: Bloomberg, TRACE, Citi Research

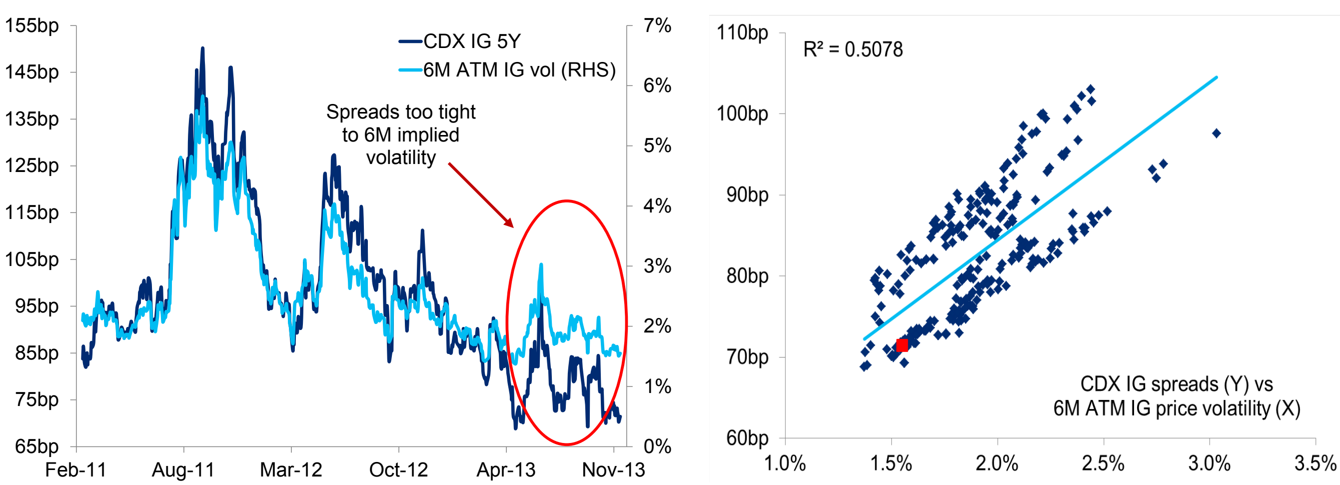
Investors who want to position for a market move in response to increased policy uncertainty will likely find themselves in such a situation where the desired sequence of events may not materialize for some time during which they continue to bleed carry. Therefore, it is especially important to be cognizant of carry costs when positioning for an event based view.

Given the tight spread levels we are experiencing currently, we believe the most obvious way to position for a sudden spread widening in response to heightened policy uncertainty (as we saw in Fall 2011, for example) would be to buy protection in credit indices. For example, an investor can buy protection in the CDX IG index for an annual cost of 70.25bp[8], which is really cheap by historical standards.

However, while this may not seem really high in absolute terms, if we consider the current spread level of roughly 130bp[9] on an IG cash portfolio, the cost of buying protection can take a larger than 50% bite out of the returns. So what can we do to reduce the cost of carry on such trades?

Options can help reduce "waiting" costs….

Figure 10. CDX IG spreads too rich compared to 6M ATM IG volatility, making covered puts attractive.



Source: Markit, Citi Research

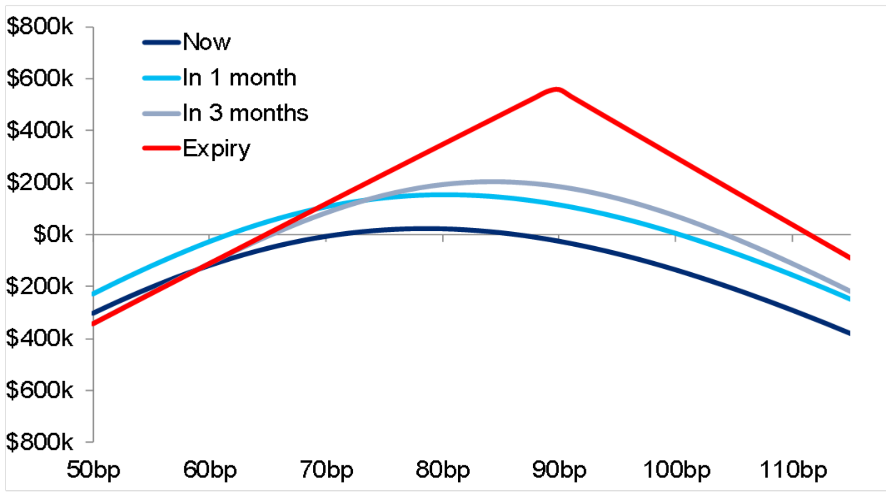
[8] CDX IG spread as of EOD 15-Nov-2013.

[9] Citi Broad Investment Grade (BIG) Corporate index spread as of EOD 15-Nov-2013.

The first way is to utilize options. We have written earlier on the covered put idea (see Has Credit Vol Decoupled from Spreads? - Price volatility is a better risk indicator) where we take advantage of our view that index spread levels are too tight compared to where implied volatility levels are (see Figure 11). We show a sample trade in Figure 12 where we buy IG index protection and fund it by selling OTM IG payers – given the ratio of notionals, the net cost works out to -13.7bp[10] for 6 months. In other words, the investor gets paid to hold on to this position for the next 6 months. The break evens are 65bp and 111bp – on the widening side, the trade remains in the money so long as spreads remain below 111bp. Thus, the trade makes money when spreads widen modestly, similar to a Fall 2011 type scenario.

Figure 11. Trade details (top), all prices/spreads are mids as of EOD 18-Nov-2013, projected P&L for various spread levels (bottom). A positive upfront means investor gets paid up front.

Trade	Index	Strike/Spot	Maturity	Notional	Price	Upfront	Delta	Gamma	Theta	Vega
Sell Payer	IG21	90.00	16-Apr-14	100,000,000	24.7c	247,025	-18,658	-424	2,076	-8,047
Buy Protection	IG21	71.38		50,000,000	71.38bp	699,214	24,968	0	-1,041	0
Net						946,239	6,310	-424	1,035	-8,047



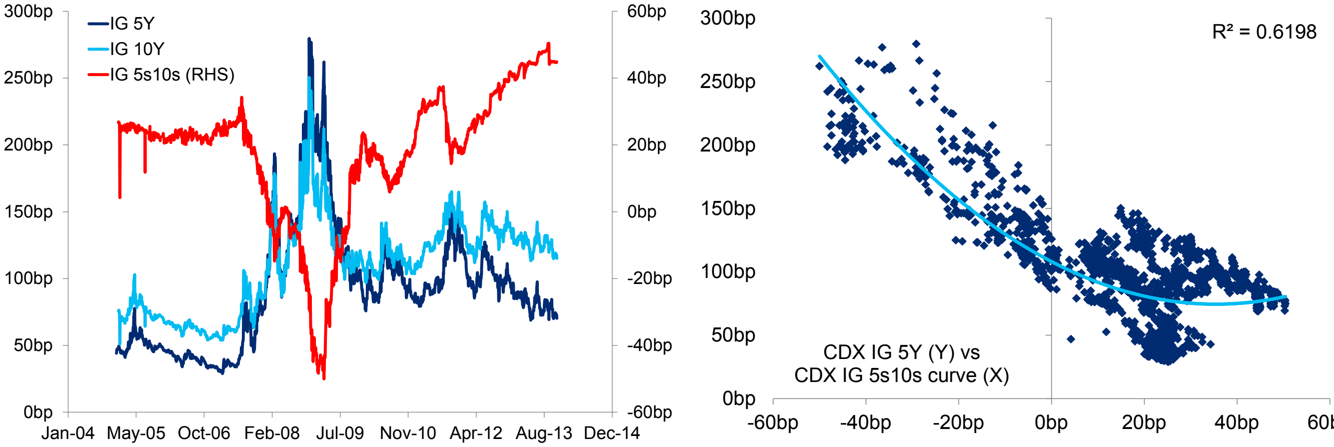
Calculations do not include transaction fees and other costs.
Source: Citi Research

…. As can index curve flatteners

A second way is to consider index curve trades. In particular, we find that for the CDX IG index, the slope of the 5s-10s curve bears an inverse relationship with the 5Y IG spread (see Figure 13). Given that the 5s-10s curve is right now close to all-time highs, a duration neutral 5s-10s curve flattener has the advantage of having a very low cost of carry.

10 Negative cost means investor gets paid to hold the short, cost calculated in bp per unit of notional on the index leg.

Figure 12. IG 5s10s curve close to all-time highs (left), and strong correlation between spreads and 5s10s (right) makes 5s10s flatteners attractive hedges against market moves that are hard to time.

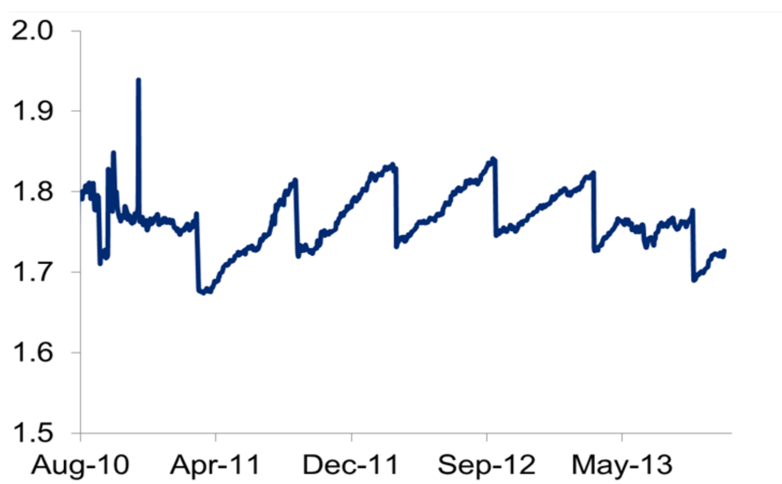


Source: Markit, Citi Research

An important issue here is the effect of roll down on the trade – as the trade rolls down the curve, given that the 3s-5s part of the curve is steeper than the 7s-10s part, a duration neutral flattener effectively acquires positive duration, and the hedger ends up with wrong way risk on the net position (see The Credit Index Call - A New Way of Looking at Index Curve Trades for a detailed explanation).

Figure 13. Trade details, all spreads/prices are mids as of EOD 18-Nov-2013 (top), ratio of OTR IG 10Y to IG 5Y duration (bottom).

Trade	Index	Maturity	Notional	Spread	Upfront	Coupon
Buy Protection	IG21	5Y	19,000,000	71.38	297,354	-190,000
Sell Protection	IG21	10Y	10,000,000	116.22	120,283	100,000
Net					417,637	-90,000



Calculations do not include transaction fees and other costs. Past performance is no indicator of future results.
Source: Markit, Bloomberg, Citi Research

We look at the effect of roll downs on the duration ratio for the past 2 ½ years in Figure 14 (bottom), and find that it has generally been remarkably stable, varying mostly between 1.7 and 1.85 for the on-the-run (OTR) index. We therefore advocate doing the trade in the ratio of 1.9:1 notional, rather than the 1.73:1 ratio indicated by the current ratio of durations. The details of the trade are shown in Figure 14 (top), and the net annual cost of carry is 10.2bp per unit of notional on the 5Y (short) leg.

The trade should be rolled into the new OTR index every 6 months, keeping the notional ratio constant.

Conclusion

To summarize, we believe the effect of policy uncertainty has been contained by extraordinary monetary stimulus by the Fed. Yet policy uncertainty is here to stay, given the political landscape in the US, and as the Fed begins tapering over the next year, such uncertainty could become a major source of tail risk. Since it is difficult to time these events, we recommend investors position themselves with hedges with very low carry costs, especially in the current low return environment.

RISKS
When buying calls and puts (or receivers and payers) the maximum loss is the premium paid. When selling calls (or receivers), the maximum potential loss would occur as the index spread decreases but is limited by the index spread being floored at zero. For puts (or payers), the maximum potential loss (amount below the strike) would eventuate should the index price fall to zero. Sector index options are cash settled. The above calculations do not include any additional fees or transaction costs. Note that ratio writing would leave the writer uncovered in one leg of the trade.

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http://www.theocc.com/components/docs/March_2011_ODD_Definitive_Supplement.pdf, and http://www.theocc.com/components/docs/January_2012_ODD_Definitive_Supplement.pdf

Investing in options other than Standardized Options may entail additional risks.

Appendix A-1

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