

# GIOA Update

Spring 2016

NEWS from the GOVERNMENT INVESTMENT OFFICERS ASSOCIATION

## 2016 GIOA Recap

The 12th Annual GIOA conference was held March 23-25, 2016 at the Monte Carlo Resort & Casino in Las Vegas, Nevada. The event was another great success, as a record 460 people attended, including 256 corporate members and 204 government members. Attendees were treated to many insightful and educational presentations, fun after-

conference gatherings and some fabulous Las Vegas weather! Special thanks goes out to our corporate sponsors, without whom the conference would not be possible. Start planning ahead for next year's conference, scheduled to be held March 22-24, 2017 at The Palms Casino Resort.



Welcome reception kicking off the 2016 Conference

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**Exhibit hall vendor**



**Keynote speaker, Larry McDonald, signing books**



**2016 Conference general session**



**One of the many educational sessions**

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# Callable Agency Debt

MICHAEL S. ERHARDT, CPA, SENIOR VICE PRESIDENT  
INVESTMENT STRATEGIST, VINING SPARKS, IBG

It is generally well understood why government-sponsored enterprises (GSE) issue callable debt securities. However, it's not equally well understood why certain GSEs tend to act more quickly in exercising their call option as interest rates move. The purpose of this article is to explore and explain the likely reason for these differences.

GSEs typically issue callable debt securities in order to complement the types of assets they finance. For example, the Federal Farm Credit Banks (FFCB), Federal Home Loan Mortgage Corporation (FHLMC), Federal National Mortgage Association (FNMA), and the Federal Home Loan Banks (FHLB) have a mission centered on enhancing the flow of credit to borrowers seeking loans to finance housing or agriculture. To fulfill their respective missions, each of these GSEs funds a variety of loan structures, some of which includes fixed rate real estate mortgage loans. A large portion of these loans permit the borrowers to repay all or any portion of their loan before the contractual maturity date. Generally, when mortgage interest rates decline, borrowers will often prepay their mortgages and refinance their homes with new mortgages that have lower rates, and prepay more slowly in a period of rising interest rate levels. To help mitigate the interest rate risk associated with the prepayment option held by the borrower, GSEs issue callable debt to hedge or reduce this exposure. Issuing callable debt provides a GSE the

option to retire debt early in order to better match the duration of its assets to the duration of its liabilities.

Callable issues are generally marketed through negotiation with the funding desks of agency issuers or through an auction process. While the FHLB, FNMA,

**...some of the benefit of issuing callable debt in terms of hedging fixed rate mortgage prepayment exposure is weakened because the GSEs issue a broad range of structures to meet investor demand.**

and FHLMC use both methods, the majority of callable debt issuance is completed through negotiated and underwritten transactions. This process is best described as a reverse inquiry in which a broker-dealer will reach out to the bond manufacturers to request a

particular structure type. Under this scenario, the issuers are essentially meeting investor demand in terms of structure and rate. As a result, some of the benefit of issuing callable debt in terms of hedging fixed rate mortgage prepayment exposure is weakened because the GSEs issue a broad range of structures to meet investor demand. In contrast to the negotiated process, the auction method (bidding process by which an issuer sells its securities to participants) can be more interest rate risk management friendly because it provides the issuer the capability to design a specific structure. This is the primary method used by the FFCB to issue its debt.

GSEs also supplement the issuance of callable debt securities with derivative instruments to economically hedge interest rate risk exposures. The primary derivatives used include interest-rate swaps, option based derivatives such as swaptions, futures, and forwards. These instruments serve multiple functions, including but not limited to mitigating earnings exposures, managing net interest margins, and/or reducing capital volatility. In the current economic environment, a common strategy among the FHLB, FNMA, and FHLMC is to use derivatives (interest-rate swaps) to convert both sides of the balance sheet to floating rate as a way of managing interest rate risk. With respect to fixed-rate

*Continued on page 5*

callable securities, issuers will often execute a receive-fixed interest rate swap in conjunction with the debt (often through a broker-dealer participating in the issuance). A received-fix swap refers to an interest rate swap under which the issuer makes a variable interest payment based upon a stated index (i.e. Libor), with the index resetting at regular intervals, and receive a predetermined fixed rate of interest based on a set notional amount and over a specified time. These contracts will generally increase in value as interest rates fall and decrease in value as interest rates increase.

The call decision process is usually straightforward and a function of interest rate levels. GSEs monitor their callable debt on a daily basis in order to determine whether it is economically feasible to call certain issues and replace them with other funding at lower costs. A general rule of thumb is that most GSEs will call their debt if they can achieve a positive option-adjusted spread and produce a rate reduction of 15-25 basis points or more.

As mentioned above, some GSEs seem to react more quickly than others in exercising their call provisions when rates move in their favor. Specifically, the FHLB, FNMA, and FHLMC are more likely to call their debt with smaller rate movements compared to the FFCB. This is largely due to a couple of unique distinctions about the FFCB's risk management process and method of bringing their debt to the market. The FFCB rarely executes an interest rate swap on individual bond issuances, whereas that practice is more prevalent with the other GSEs. By executing a swap

that is tied to a bond issuance, the GSE can mitigate its interest rate risk exposure, but becomes somewhat subordinate to future decisions of the counter-party to the swap. If the counter-party cancels the swap, the GSE is normally incented to call the debt since it's likely that rates have moved lower, otherwise the GSE is left with an unhedged position. Because the FFCB tends to supplement the issuance of callable debt with a macro-hedging strategy, they are not beholden to a third-party and generally have more flexibility or discretion as to when or what point they decide to call a specific bond issuance.

The other distinction about the FFCB is how it brings its debt to the market. They rely on an auction process that is typically more

expensive and less frequent than negotiated deals. Because of the economics and timing difference, this gives the FFCB a different trigger point versus their competition in terms of deciding when and at what point to call their debt.

In conclusion, if you have a concentration in callable debt among certain GSEs, consider diversifying your portfolio with callable debt issued by FFCB. The debt may potentially offer modestly higher spreads and returns given the lower probability of being called by the issuer.

**Save the Date!**  
**13<sup>th</sup> Annual GIOA Conference**  
**March 22-24, 2017**  
Palms Casino Resort | Las Vegas, Nevada

**More information coming soon!**

# Speed vs Accuracy: The Rise in Use of Real-time GDP Models

ROB ZAMBARANO, CFA, DIRECTOR MACRO PRODUCTS, GUGGENHEIM SECURITIES

Gross Domestic Product (GDP) is the principal report on the health of the US economy, and is used by market participants to measure how fast or slow it is growing. Data on GDP is released by the Bureau of Economic Analysis (BEA) quarterly, with advance estimates released each year in January, April, July, and October. Revisions to estimates are released in the following two months for each quarter. Annual revisions typically occur in July for the prior year. The backward looking nature of the data release shows not only past performance of the economy, but also provides an indication of the rate of growth from quarter to quarter. This provides policy makers, market participants and business leaders some insight into the health of the US economy. Given the increasing speed at which capital can be allocated by investors and business leaders through investments and capital expenditures, there is a growing demand for a more real-time indicator of GDP activity. Hence, we have observed the rise in prominence of the Atlanta Fed's GDPNow and more recently, the New York Fed's Nowcast GDP models.

Real-time GDP models attempt to provide more timely forecasts for GDP. However, it's important to keep in mind that there is a trade-off between timeliness and accuracy with real-time GDP models. Errors

are inherent with all economic models, so comparisons should be based on the size of the respective error terms. Most real-time models attempt to extrapolate an estimate of GDP from monthly data releases

**Given the increasing speed at which capital can be allocated by investors and business leaders through investments and capital expenditures, there is a growing demand for a more real-time indicator of GDP activity.**

associated with the four major components of GDP: Personal Consumption, Private Investment, Net exports, and Government outlays.

## **Atlanta Fed GDPNow**

The Atlanta Fed's GDPNow model begins with a pre-Advanced estimate 90 days prior to the release

from the BEA. This conventional statistical model is updated to incorporate key data releases and their impact on the model's forecast. So, as more data becomes available, the model should begin to adjust GDP estimates and become increasingly more accurate. The goal is to provide a real-time estimate of GDP since the actual official data release is lagged. According to data released by the Atlanta Fed, the accuracy of the model falls within an average absolute error of 0.71 percentage points and a root mean square error (RMSE) of 0.93 percent which is more accurate than the 3 percent margin of error for most political polls. The model is recalculated and updated after GDP-specific data releases in an on-going basis.

## **New York Fed Nowcast GDP**

New York Nowcast GDP estimator is another statistical model (dynamic factor) that attempts to provide real-time forecasts for GDP. As noted in the Liberty Street Economics blog, the New York Fed just began releasing the results on their model in April. This model appears to function more like an economic surprise index that measures a data point's actual spread to the forecasted figure, and then apply a factor weighting to the spread. The factor weights were initially determined by running a

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series of regressions to determine appropriate allocation to the data components for the Nowcast GDP model. The weight also captures the timeliness and quality of each piece of information, then the model makes an adjustment for market moving indicators. The model is recalculated and updated on a weekly basis, incorporating GDP-specific data releases during the week.

### **Which Model is More Accurate?**

Each of the two real-time models utilizes a different statistical technique to arrive at an up-to-date estimate for GDP. Both of them have varying errors that can produce different real-time estimates for GDP. A prudent method to utilize these new statistical tools is to collectively look at the directional nature of both outputs, while keeping in mind that the specific levels for each model will vary. Neither model is going to be more accurate than the

other, but when used in concert, should be able to provide a more real-time indication of the rate of expansion or contraction of the economy. Over time, both models should track in-line with the actual lagged readings produced by the BEA. Keep in mind that even the lagged readings from the BEA's GDP release are revised as more accurate data becomes available. There is always a tradeoff between speed and accuracy, even when it comes to economic forecasting.

# 7 Questions to Ask Before Connection to an Electronic Platform for Your Bond Trading Needs

DAVID KREIN, HEAD OF RESEARCH, MARKETAXESS

Bond trading is full of challenges, including a fragmented market that decreases liquidity sources, a proliferation of manual processes, and regulations that squeeze profits.

Electronic trading technology has the ability to obliterate these challenges by providing additional liquidity that improves pricing, automating processes, and improving trading efficiency to reduce costs.

Electronic trading can transform trading across all types of bonds: corporates, municipals, asset-backed securities and US agencies, among others. By providing more efficient trade execution and processing, access to increased liquidity, and reducing costs, investors can reap a myriad of benefits.

But not every electronic trading platform is created equally. Here are seven questions to ask as you evaluate an electronic trading solution for your bond trading needs.

## **1. Does the platform increase efficiency without changing your workflow?**

An electronic request-for-quote (RFQ) system is designed specifically for the credit markets. It increases efficiency by automating, but not disrupting, the traditional workflow through which institutional investors and dealers source and provide liquidity. It enables participants to maintain trading relationships with their existing counterparties, and to expand their pool of trading counterparties if they wish.

## **2. Can I submit bid/offer lists?**

A fully comprehensive electronic platform should offer the ability to submit bid and offer lists with multiple line items in a single inquiry, to significantly increase efficiency of sourcing liquidity. You should be able to view a consolidated dealer inventory when creating a bids wanted list. The bids wanted list should enable you to receive bids on both single and multiple line items.

### 3. Does the platform provide pre-trade and post-trade data feeds?

Consolidated pre and post data feeds from multiple sources, alongside historical trade data enable you to make more informed trading decisions for better price discovery.

### 4. Does the platform offer a broad pool of participants for increased liquidity?

An all-to-all trading platform enhances liquidity by enabling all participants on the platform to source liquidity from all other participants. It also opens up the number of potential trading counterparties to include, for example, hedge funds and ETF AP/ market makers, thereby expanding the liquidity pool.

To improve liquidity for all market participants, dealers and investors should have the ability to view and respond to orders even if they did not receive the inquiry directly.

However, to protect against information leakage, the platform should allow both dealers and investors to initiate and complete anonymously.

### 5. Does the platform connect to order management systems (OMS)?

The only way to enable straight through processing is through connectivity to dealer and investor order management systems for both pre-trade and post-trade activities. Connectivity should support the automatic flow of trade data back to the OMS. Reporting and updating should occur automatically.

### 6. Does the platform offer comprehensive transaction cost analysis (TCA)?

A best-in-class TCA service should provide several reporting levels depending on the user. Senior executives shouldn't have to wade through detailed reports, so look for a platform that offers a one-page high-level TCA summary for reporting purposes, in

addition to more detailed analysis by size, sector, maturity, traders, and side for front office users and risk managers. Finally, compliance will need to view trade-by-trade analysis.

### 7. Does the platform address compliance?

Look for a platform that offers electronic trade blotters and audit trails. These features will automate compliance and free staff up to focus on more value added activities.

#### About MarketAxess

MarketAxess operates a leading e-trading platform that enables market participants to trade credit instruments using MarketAxess' patented technology. Over 1,000 institutional investor and broker-dealer firms are active users of the platform, accessing global liquidity in U.S. high-grade, Emerging Markets, high-yield, Eurobonds, U.S. Agencies, Munis, CDS and other fixed-income securities. It also operates MarketAxess Open Trading, the leading centralized all-to-all electronic trading marketplace that connects fixed income market participants, increasing liquidity options.

MarketAxess offers all institutional bond market participants multi-dealer RFQ trading, full STP connectivity from pre- to post-trade, complete audit trails and trade blotters and best-in-class TCA. Corporate bond traders can instantly access over 90 broker-dealers supporting a comprehensive range of securities, a choice among \$30+ billion and 12,000+ line items of dealer inventory, and an electronic bid / offer list capability of up to 40 items per list. For municipal bonds, MarketAxess offers bid/offer list execution of up to 200 line items as well as access to IDC and JJK evaluations and MSRB data. Traders of U.S. Agencies can inquire via RFQ up to 26 dealers simultaneously, execute trades on returned prices and trade on spread, price or Money Market Equivalent (MME) yield. MarketAxess is currently the only electronic fixed-income trading platform to offer e-trading of ABS, non-agency RMBS and CMBS to institutional investors with bid/offer list functionality for up to 40 simultaneous line items.

**Electronic trading  
can transform  
trading across all  
types of bonds:  
corporates,  
municipals, asset-  
backed securities  
and US agencies,  
among others.**

# The Implications of Extremely Low to Negative Rates on the Front-End of the Curve for Portfolio Managers

BRAD BROWN, DIRECTOR, WELLS FARGO SECURITIES  
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Rates across the world remain very low. All-in yields continue to get pushed lower across the world due to monetary policy, quantitative easing measures and countries devaluing their currencies. All of those factors continue to make the U.S. markets very attractive to foreign investors looking for additional yield, especially in the Treasury market. Quantitative easing measures by the ECB continue to weigh on yields, as the German Bund curve is now negative out to the 9-year point compared to the 7-year point prior to the aggressive March 11 ECB meeting. We think this trend will continue to weigh on all-in yield levels across the world, including the U.S.

Global growth has remained “soft” causing numerous central banks to use negative interest rates to stimulate their economies. In early January, the BoJ surprised investors by moving to a negative deposit rate. Two months later, the ECB decided to be even more aggressive and cut the deposit rate further into negative territory and announced a more aggressive asset purchase program. Both of these policy actions signaled

to investors that other regions in the world are not as far along in the recovery process and are having to take extraordinary measures to spur growth and inflation. The result of these policy actions has re-shaped sovereign yield curves in Europe and caused yields to severely bull-flatten. As illustrated in the table below, German bund yields since the beginning of 2014 on longer maturity securities have decreased by a larger amount than the yields on short-term securities. The 30-year part of the German Bund curve is now trading inside of 0.75% and the 10-year yield is less than 10 bps.

Taking into account negative rates, flatter yield curves and increasingly dovish actions by central banks, there has been some concern that a scenario similar to what has happened in the Eurozone (Germany) could unfold here in the U.S. When asked about negative rates in her testimony before Congress Fed Chair Yellen said that she “...wouldn’t take those off the table.” For this scenario to occur both domestic growth and inflation expectations would have to deteriorate substantially. Economic

data continues to be mixed with a bias toward weaker than expected releases as construction spending, factory orders and trade balance reports all had negative implications for GDP. Recently, economists have been lowering their growth forecasts for 2016-2018. With that, first quarter GDP forecasts had been revised lower as well several times throughout the first three months of 2016. Even after those downward revisions, first quarter GDP came in weaker than expected at 0.5%. If economic growth underperforms current expectations, the Fed could be forced to lower the Fed funds rate and potentially inject more stimulus into the economy. In this type of scenario, the yield curve would

Curve Tenor	German Bund 4/7/16	German Bund 1/1/14	Yield Decline (bps)
1M	-0.63%	-0.03%	60
3M	-0.63%	0.09%	71
6M	-0.53%	0.09%	62
1Y	-0.51%	0.14%	65
2Y	-0.51%	0.21%	72
3Y	-0.51%	0.32%	83
4Y	-0.47%	0.60%	107
5Y	-0.39%	0.92%	130
6Y	-0.36%	1.17%	153
7Y	-0.27%	1.38%	166
8Y	-0.17%	1.59%	177
9Y	-0.04%	1.84%	188
10Y	0.09%	1.93%	184
30Y	0.72%	2.75%	204

Source: Bloomberg

Continued on page 11

continue to bull flatten significantly and yields would dramatically shift lower.

While this type of scenario is not the most likely outcome, we do not think the bull flattener is deep tail risk either; as we would assign roughly a 20% probability of that outcome. That being said, it is important for investors to be mindful of this scenario and how it could impact portfolios. In the past, we have discussed the economic effects of extremely low and even negative short-term rates such as sub-optimal resource allocation, asset bubbles and hoarding of cash. It is important for investors that focus on the short-end and intermediate parts of the curve to note that negative short-term rates and a flat yield curve have real effects on portfolio valuation and asset allocation.

### The Effects of a Modified Bull Flattener

We looked at a scenario when the U.S. yield curve flattens in a similar, but less severe manner than Germany's bull flattening that occurred over the past several years. In the table below, we take the yield movements of the German Bund curve from the beginning of 2014 to March 31, 2016 (27 months). Then, we took 50% of the yield movement in the German Bund curve and applied that move to the term structure of the U.S. Treasury curve over a 21-month period. After that movement has been applied to the Treasury curve, the new term structure is located in the second to last column of the table. Finally, the last column of the table illustrates the total amount

of bull flattening that this scenario implies.

### The Effect on Short and Intermediate Duration Portfolio Managers/Investors

Negative yields on the front-end of the yield curve could potentially create both an opportunity cost and an actual cost to portfolio managers. In a negative yield environment, holding cash has a cost and a potential bull flattening of the yield curve could have a devastating effect on portfolio performance. The negative consequences of such a scenario playing out here in the U.S. could include:

- 1) Investors who have a large portion of their portfolio allocated to cash could face a larger inflow of cash as lower rates create an incentive for issuers to call various callable securities.
- 2) With an influx of cash and lower yielding securities, investors are forced to reinvest proceeds at ultra-low yields.
- 3) Reinvestment of called proceeds at ultra-low yields produces a portfolio income that is insufficient to cover liabilities and expenses.

In a bull flattening scenario that we outlined above, a 5-year agency bullet outperforms the most in that environment over a 21-month period. This reaffirms the premise that if rates are rallying significantly, it would

Curve Tenor	German Bund 4/7/16	German Bund 1/1/14	Yield Difference	50% of German Bund Rally	Treasury Curve 4/7/16	Treasury Curve	U.S. Treasury Curve Bull Flattner
1M	-0.63%	-0.03%	0.60%	0.30%	0.20%	-0.10%	0.30%
3M	-0.63%	0.09%	0.71%	0.36%	0.23%	-0.13%	0.36%
6M	-0.53%	0.09%	0.62%	0.31%	0.34%	0.03%	0.31%
1Y	-0.51%	0.14%	0.65%	0.32%	0.52%	0.20%	0.32%
2Y	-0.51%	0.21%	0.72%	0.36%	0.69%	0.33%	0.36%
3Y	-0.51%	0.32%	0.83%	0.42%	0.82%	0.40%	0.42%
4Y	-0.47%	0.60%	1.07%	0.53%	1.02%	0.49%	0.53%
5Y	-0.39%	0.92%	1.30%	0.65%	1.14%	0.49%	0.65%
6Y	-0.36%	1.17%	1.53%	0.76%	1.35%	0.59%	0.76%
7Y	-0.27%	1.38%	1.66%	0.83%	1.45%	0.62%	0.83%
8Y	-0.17%	1.59%	1.77%	0.88%	1.56%	0.68%	0.88%
9Y	-0.04%	1.84%	1.88%	0.94%	1.66%	0.72%	0.94%
10Y	0.09%	1.93%	1.84%	0.92%	1.69%	0.77%	0.92%
30Y	0.72%	2.75%	2.04%	1.02%	2.52%	1.50%	1.02%

Source: Bloomberg

Continued on page 11

Security Description	Spread	Yield	Eff. Dur.	Eff. Conv.	Mod. Dur.	OAS	HROR	TR Dollars
5-Year Agency Bullet	15	1.395	4.81	0.26	4.81	22	2.01%	2,010,000
5-Year NC 3-Month Agency Callable	49	2.111	1.62	-2.27	4.68	-8	1.35%	1,350,000
5-Year Agency Multi Step-Up	91	2.126	1.80	-1.95	4.77	9	1.56%	1,560,000

Source: Bloomberg, Blackrock and Wells Fargo Securities

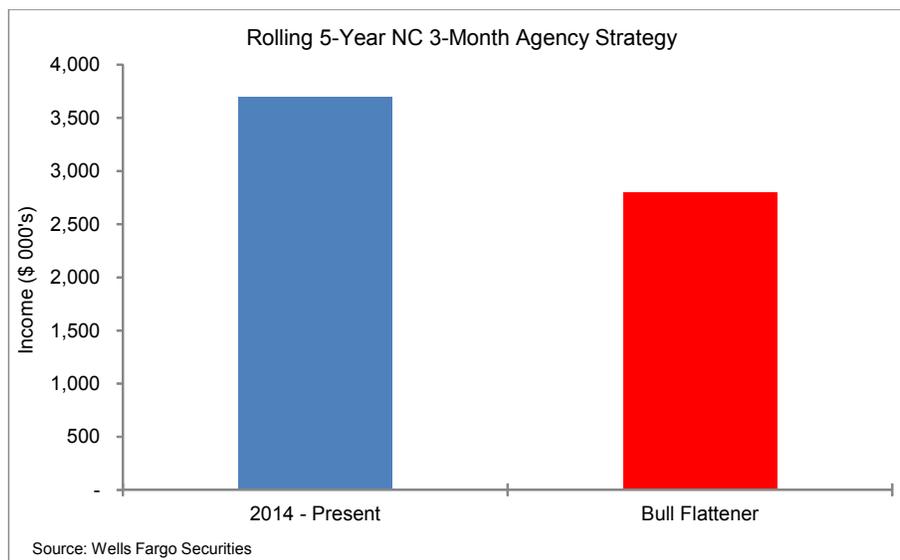
benefit investors to potentially extend duration and focus on bullet type structures. This strategy also works very well with a Fed that is going to be “lower for longer” over the next two to three years.

The problem with the strategy of buying callables and simply “rolling them over” if they get called is that a bull flattening scenario with negative front-end yields squeezes income on all parts of the curve. The cost of cash mentioned earlier, coupled with reinvestment proceeds into the same structure, results in diminishing coupon income from the portfolio, a potentially catastrophic outcome for portfolios whose purpose are to generate a minimum level of income. Investors who have not yet considered the potential impact of a bull flattener over the next two years should consider measuring and assessing the potential impact on their portfolios and balance sheets.

It is self-evident that bulleted bonds with more duration outperform callables and more negatively convex alternatives in a bull flattener. But for income oriented investors, the bull flattener also can result in a severe reduction in portfolio income.

To illustrate this point, we analyze a simple portfolio of one security - a 5-year NC 3-month that was issued two years ago. In the first scenario, all called funds were reinvested in the same structure and rolled over. The chart shows that over the past two years, that strategy generated \$3.7 million per \$100 million of par value. We assumed an average coupon over the two years of 1.85% on a \$100 million investment. In the other scenario, we assumed that the bond is held for two years and the proceeds are reinvested in the bull flattening environment. That particular scenario only generated \$2.8 million per \$100 million of par value, an income reduction of almost 25%.

And that severe reduction is the best outcome in a bull flattener. A further problem that arises is that when bonds get called, many investors try to time the market by waiting for a back-up in yields before redeploying cash. The problem that negative rates pose for such a strategy is obvious. First, there is not just an opportunity cost, but an actual cost to sitting in cash when front-end yields are negative. Second, the market could rally further rather than “backing up,” creating an even greater diminution in coupon income for the portfolio manager. When they finally capitulate, the coupons they ultimately



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get could be ultra-low, ensuring a much greater than 25% loss of income from the portfolio. We do not know what the ultimate path of interest rates will be. We do know that the mathematics behind fixed income investing are immutable, and if the curve continues to bull flatten, investors need to be aware of the risks to portfolio income and plan accordingly.

## Disclosure Appendix

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# Tactical asset allocation in a risk-on, risk-off world

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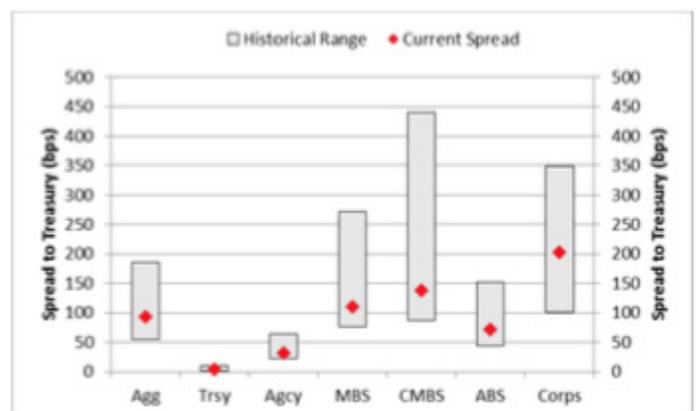
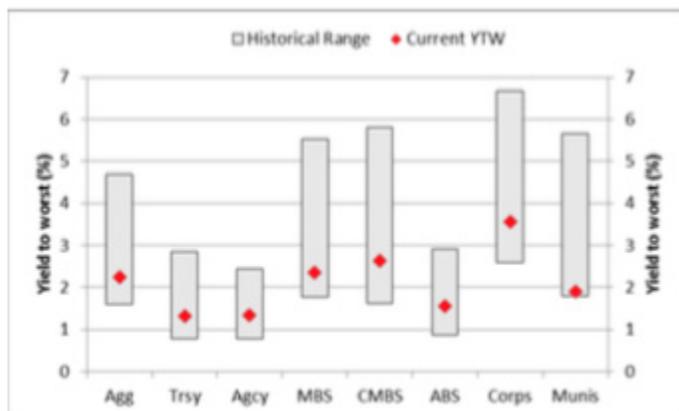
JACOB B. EISEN, MANAGING DIRECTOR, MAXIM GROUP



Although sometimes it's hard not to get caught in the debate about how we're either going to 1) die a slow, deflationary death that will lead to a round of NIRP because the Fed hiked too early, or 2) start racing headlong off a reflationary cliff because the Fed is being too hesitant in hiking rates, we instead continue to believe that the truth is somewhere in between.

Admittedly, our crystal ball is still in the shop, but the most reasonable baseline view seems like the boring "muddle through" scenario that seems to have recently fallen out of the favor with the hipper, edgier economists and strategists out there. Be that as it may, it still sounds right to us.

**Figure 1: The muddle through scenario suggests that "lower for longer" will feel like "lower forever," if it doesn't already**



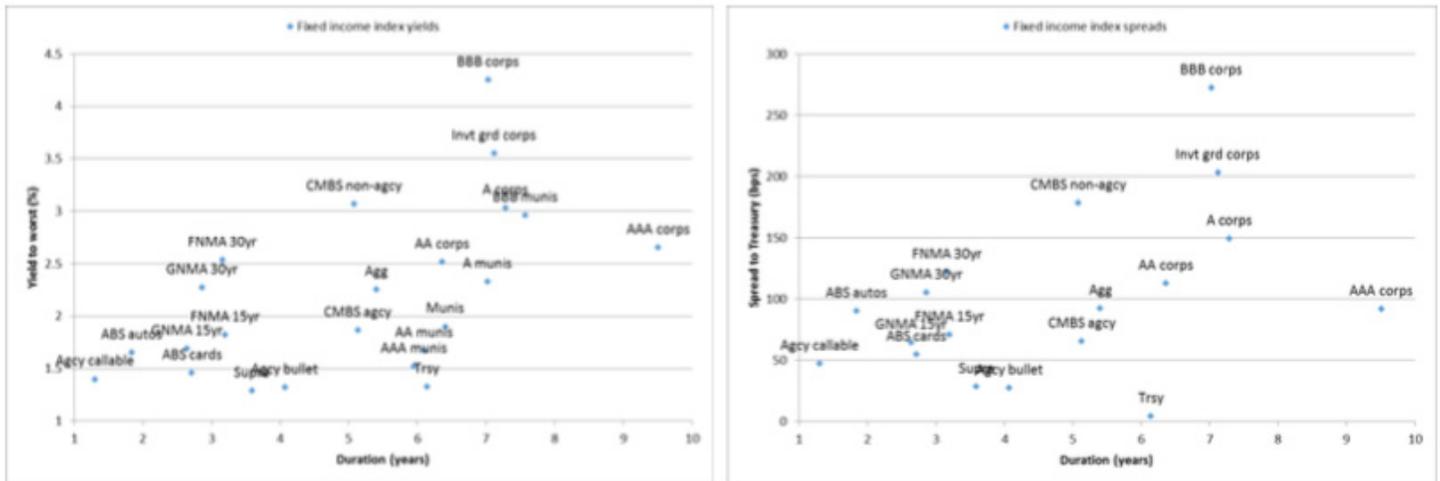
Source: Maxim, Bloomberg, as of March 2016.

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In other words, we think that these are the sort of volatile markets that are typical in the very late stages of the credit cycle. Perhaps it's the natural hangover that was bound to follow years of extraordinary monetary policy. So while it appears that the jury may still be out on the question of whether or not interest rates are at the beginning of a secular bear market, it certainly does appear that we're in the midst of a secular decline

in the return on capital (e.g., falling asset turnover and decreasing margins lead to declining ROEs, despite an increase in overall financial leverage). Credit valuations are definitely more interesting these days, but we're still cautious on enthusiastically recommending that investors take too much credit risk. Corporate balance sheet deterioration is real, and it's becoming increasingly problematic.

**Figure 2: Yields and spreads are stingy, unless you're willing to trade down the credit curve**



Source: Maxim, Bloomberg, as of March 2016.

### Strategic and Tactical Asset Allocation

These are the sorts of themes that factor prominently into most investors' investment decisions, and thus provides us with a very convenient segue to some very important question for portfolio managers. For example, for those that don't already have one, how should we set that benchmark? And on a related note, when and how should it be varied (e.g., over-weights and under-weights to particular markets)? At the risk of over-simplifying a very complicated question, and using commercial banks as our example, the textbook response is that the allocation should be set based upon strategic objectives (e.g., composition of the loan book, growth expectations, overall asset and liability sensitivity, funding strategy and net interest income target), while the deviations should be set based upon tactical opportunities.

The former is obviously very idiosyncratic, with much diligence required, and so it's hard to generalize. Additionally, and more practically, it's a question that's already been answered for most institutions, since it's

an integral part of creating the investment mandate, which typically precedes the investment portfolio. Hence our focus today is on the tactical deviation part of the equation. The challenge here, in a nutshell, is to find a way to achieve a shrewd mix of the things we all want (e.g., yield, spread, total return) against the context of an unforgiving investment environment that's still defined by too much money chasing too few bonds.

Targeting excess return while maintaining an appropriate risk profile in a market as competitive as today's, is obviously no easy task. Market levels notwithstanding, tweaking exposures through the investment portfolio almost always has one very important comparative advantage, which is speed. Using banks as an example, recognize that once a particular concentration in the bank's loan book builds, it usually takes time to pare that exposure down, in one way or another. However, because the investment portfolio typically represents almost 20% of their balance sheet these days, a trade in the bond market that settle T+3 offers the potential to mitigate concentration in that loan

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book (e.g., ebullient CRE loan growth might motivate selling some CMBS bonds) very quickly and efficiently. Likewise, other types of loans and securitized products offer the same potential, not to mention to corporate loans and corporate bonds.

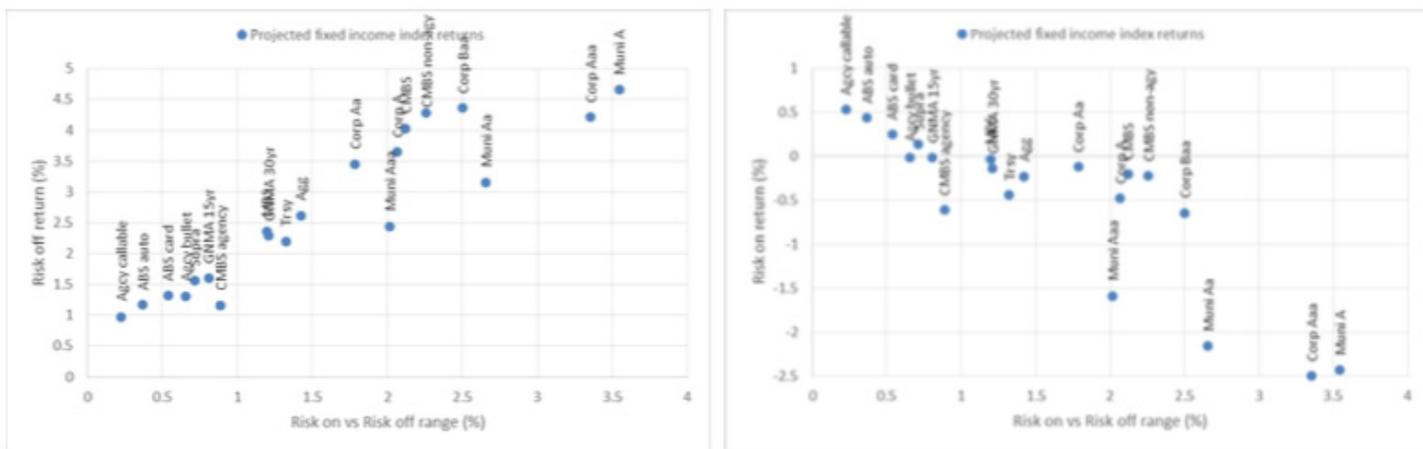
Another good – or bad, come to think of it – example of how sometimes dangerous levels of concentration can creep into a balance sheet, often with the best of intentions, is through the combination of loans, increasingly of the leveraged ilk, on the balance sheet dovetailing with collateralized loan obligation (CLO) products in the investment portfolio. The risk in this should be intuitively obvious, but the magnitude can sometimes be daunting, so daunting that we think the topic might justify its own monthly publication sometime in the future.

## How We Analyze Markets in a Risk-On, Risk-Off World

Typically we use the standard method to calculate horizon period returns over a six month horizon, with option adjusted spread (OAS) valuations kept constant after applying certain parallel and twisting interest rate shocks. A main advantage of this vanilla approach is that it's unbiased, however, one major disadvantage is that it's not particularly representative of today's markets, where we seem to move from risk-on to risk-off paradigms. So we created risk on and risk off by looking at recent historical trends for different fixed income markets, then defining each scenario consistent with that history, then calculating the expected horizon period returns.

In terms of defining the scenarios, we say that the risk on scenario means that yields rise by an average six month "up" move, while spreads narrow by an average six month "down" move. Risk off is the opposite, i.e., an average six month "down" rally in rates, with an average six month "up" move in spreads.

**Figure 3: Projected returns using our risk-on, risk-off approach highlight how important the spread duration call can be**



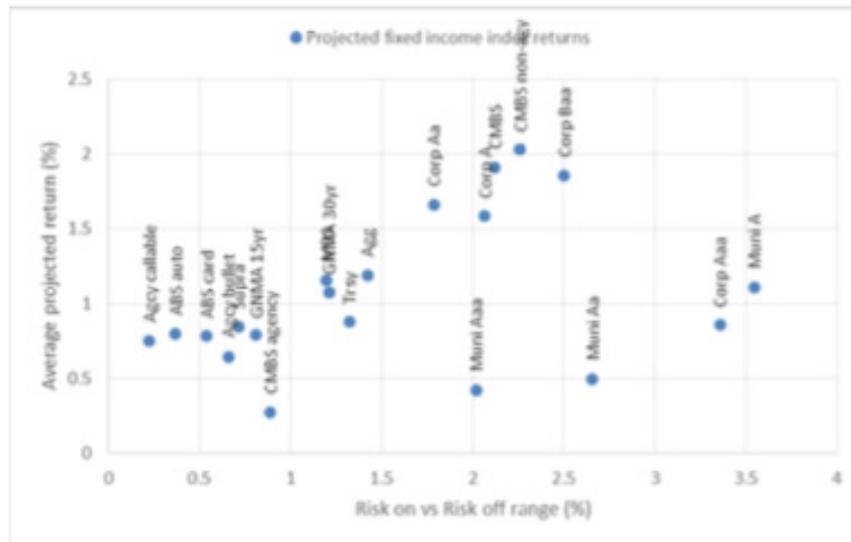
Source: Maxim, Bloomberg, as of March 2016.

Using this information, we project total returns for each scenario, then plot them with the returns on one axis (aka, the "return") and the difference in return between the two scenarios on the other (aka, the "risk"). Perhaps not too surprisingly, the projected returns are proportional to duration and spread. A quick look back and forth between the exhibits plotting yield/spread

offering and the exhibits with projected returns explains a lot about why there are so many fans of mortgage and muni bonds these days; please note that munis have not been adjusted for tax exempt status. Corporates stand out as the high risk, high reward alternative; but again, it's the high risk part of that proposition that leads us to believe that caution is still warranted.

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**Figure 4: Averaging the returns of the two scenarios**



Source: Maxim, Bloomberg, as of March 2016.

In fact, in terms of distilling the several analyses and exhibits into a few actionable conclusions, we would start off with the obvious: the better, juicier opportunities appear to be in spread products, rather than rates products. Of course, it's difficult to avoid the government-related sector altogether because it's a safe, liquid hedge against the economic doldrums, which occasionally translates to some relatively impressive risk-off total return performance; but the yields are just so depressingly low, it almost hurts to talk about it.

Our second conclusion is, like we mentioned briefly before, changes to the investment portfolio can be made much more nimbly than they can in the commercial loan portfolio. While that's always the case, it's particularly important to make sure this capability is being fully utilized these days because reports from various sources (e.g., government regulators, rating agencies, independent research) have increasingly suggested that certain banks have loan portfolios that are becoming

concentrated. The upside of an investment environment defined by frustratingly low incremental yield and spread opportunities, is that the effective cost to modify allocations for strategic reasons (e.g., swapping out of CMBS and into ABS, and perhaps avoiding CLOs altogether) should come with less of a bite than it has historically, so you might as well take advantage of it.

Our third and final conclusion is our standard piece of advice for Treasurers: Don't ever be a trader with your investment portfolio! It seems like a layup to say that rates are bound to rise in the longer term, however, over the short and medium term, it's more prudent to invest as though you are agnostic about rates – pretend to be agnostic, if that's what it takes. And be ready for volatile markets, so that you can play offense instead of defense because it's more fun that way.

**Link to complete article:**

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