GIOA Update

Fall 2014

NEWS *from the* GOVERNMENT INVESTMENT OFFICERS ASSOCIATION

New US Money Market Regulations Impact LGIPs

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Many local government investment pools (LGIPs) use money market funds to maintain levels of overnight liquidity – relying on net asset value (NAV) stability and flexible liquidity. Recent SEC money market fund reforms could impact the way LGIPs are currently utilizing investments in these funds.

Furthermore, many LGIPs are "money market fund-like" investment pools that are required by state law, and under generally accepted accounting principles to operate consistently with the Securities and Exchange Commission rule governing money market funds (Rule 2a-7).

Key aspects of the SEC's new rules are likely to make money market funds less attractive and/or more expensive for LGIPs.

MMF Reform Expected to Impact LGIPs Investment Decisions

Very simply put, many LGIPs invest in constant NAV money market funds in order to ready access to portfolio liquidity. Key aspects of the SEC's new rules are likely to make money market funds less attractive and/or more expensive for LGIPs.

The SEC released its final money fund reform ruling on July 23, 2014. The new rules state that institutional prime and municipal money funds must use floating NAVs, rather than the stable NAV of $1.00 that has been the standard since the industry's inception and a significant reason investors utilized the funds. The new rules impose additional responsibilities on fund boards and allow the boards of directors for nongovernment funds to impose liquidity fees and redemption gates during times of stress.

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GIOA Officers

Additional provisions of 2a-7 reform could also drive investors away from funds, including increased and expanded Board of Director responsibilities, namely the non-delegable discretion to impose liquidity fees and redemption gates during times of economic stress. During certain circumstances (if weekly liquid assets fall below 30%, for example), the Board has the discretion, based on the board's fiduciary responsibility to act in the interest of all fund shareholders, to impose a fee and/or suspend redemptions. The Board is permitted to take certain factors under consideration when making this decision, including, among other things, market liquidity, the composition of the shareholder base and the liquidity profile of the fund. If weekly liquid assets fall below 10%, boards are required to impose a liquidity fee, unless the board feels that doing so would not be in the best interests of the fund's shareholders.

Moreover, municipal treasurers' investment policies may need to be updated to account for the change to floating from stable NAV, a potentially time-intensive endeavor. While investment policies should be updated on a yearly basis as a 'best practice', this does not always happen. Especially now, updates to investment policies will require a careful, strategic approach. The SEC's rule changes may also increase the cost cash management if new operational and accounting systems have to be implemented to accurately capture floating NAVs. We understand many investors have been waiting for clarity on the new regulations before making investment policy changes or updating their systems.

Investment Structure for Certain LGIPs May Change With Reforms

LGIPs are governed by the Governmental Accounting Standards Board (GASB), which generally requires that pools not complying with Rule 2a-7 report their share of unrealized gains or losses to each participant, who in turn must report those gains/losses on their balance sheets. However, given the SEC's new rules, it is unclear whether LGIPs will now need to adopt floating NAVs if they invest in nongovernment securities (including municipal securities). GASB is aware of the ambiguity and has identified it as an agenda item to address, although LGIPs will remain in limbo while new rules are being written.

Subject to GASB's interpretation, it's possible that LGIPs could continue to offer stable NAVs and maintain amortized cost accounting by investing in government and agency securities. However, while LGIPs generally operate with low expense ratios, investing exclusively in government securities may not cover operating expenses for the pool, at least in the current low yield environment. Alternatively, if an exemption is not provided by GASB, the costs of making changes to systems and operations to comply with a floating NAV, as well as fees and gates may prove prohibitively expensive for some LGIPs.

We believe that the new rules also create uncertainty for LGIP investors, whether captive or voluntary, because of the potential changes to LGIP structures. Captive investors

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are typically required by state law to invest in LGIPs, and in some cases specifically in those that transact at a stable NAV or that do not fluctuate in value. Absent statutory or accounting relief, this change will leave some municipalities forced out of investing in money funds, with limited or no alternative cash management options. The alternatives may be less liquid or provide less yield than money funds. For example, there is limited appetite from banks to accept institutional deposits given changes to bank regulations. Voluntary LGIP participants may elect to invest their cash elsewhere, but have historically favored LGIPs as a low-cost investment alternative.

Additional Guidance Necessary

The SEC set the implementation period for the main aspects of money fund reform at two years (effective October 2016), giving LGIP managers and participants time to adjust to the new rules. However, while private sector money fund managers and their clients can begin to respond to the new regulatory regime, LGIPs and their investors must still wait for guidance from GASB or statutory authorities. Without further guidance from various constituents, namely GASB, LGIPs are unable to make the necessary changes, causing uncertainty in the near term.

Agency Callable Step Up Primer

JAMES RHODES, CFA, ANALYST, UBS FS

We've discussed agency callables regularly in publications like the Agency Market Admiral, however, we've almost exclusively restricted our conversations to fixed rate structures like so-called American, European and Bermudan style callables. There we've stressed the importance of three main structural features of callable notes: 1) the final possible maturity date; 2) the lockout date, before which the note cannot be called; and 3) the type of embedded option, e.g., whether the option is continuous anytime after the lockout date, or restricted to only being callable on certain dates.

One thing we have heretofore left unchanged in the analysis is the coupon, so far assuming that it is fixed for the life of the bond, like a typical Treasury note or agency bullet (i.e., non-callable bond). No more! Today we focus on so-called "step up" notes, which are callable notes that have non-constant and rising coupons. The coupons are scheduled to increase once or more, with the steps usually scheduled to coincide with the call dates so that the issuer is effectively forced into a decision to either call the note early or pay the higher coupon to the investor.

Fixed income investors who expect rising rates should consider callable step up notes.

In terms of comparing and contrasting step ups to other fixed rate callable notes, recognize that buying a fixed rate callable is typically associated with the concept of selling an at the money (ATM) option. This is because a par-priced callable note should generally have the coupon at its call date set to the related forward rate in the bullet market. A step up callable, however, is associated with the concept of selling an in the money (ITM) option because the coupon at the call date will typically be set at a rate higher than what's implied by that forward curve.

For a moment sparing the reader a discussion of swaptions market details, the bottom line is that par-priced fixed rate callables should experience their best relative performance in the scenario where interest rates evolve to the forwards because the embedded option (i.e., the option the callable note buyer has implicitly sold) should fall in value. In a related fashion, then, step up notes typically outperform when rates end up higher than what's implied by the forwards.

Just a little bit more theory

At the risk of glazing over several eyes, we take a moment to flesh out that last very important point by relating 1) the coupon to 2) the embedded option to 3) the callable's relative total return performance. Again, recognize that the coupon of the step up note should presumably be set at a rate above the ATM forward rate. For those wondering what has to be sacrificed for the step up to have a higher back end coupon (vis-à-vis the fixed rate callable) and still be priced at par, the answer is that the initial coupon of the step up must be lower than the comparable fixed rate callable.

The fact that the step up has a higher back end coupon means that while the fixed rate callable note performs best (versus comparable duration bullets) when interest rates evolve to the forwards, step up callables instead generate their greatest excess returns when rates end up higher than what the forwards imply. Hopefully, this makes clear why we say that agency callable step up notes are something that investors who expect (or fear) a rising rate environment should consider.

A type of "insurance" against rising rates

Therefore, callable step up notes offer incremental yield and provide an amount of bearish protection. That's because in a rising rate environment, the higher subsequent coupons mean that either one of two things will happen. First, the higher coupon increases

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the likelihood of call, and if the note is called, then the investor will have the opportunity to reinvest cash at higher rates. Second, if rates rise so much that the note is not called, then the investor gets a higher coupon, which mitigates the effect of the higher rate environment.

In that sense, step ups can be thought of as a kind of insurance against rising rates, with the "cost" being the relatively lower initial coupon. As conceptual compensation, the investor increases the odds that the bond is called (because of the higher back end coupons). Hence, the cash can be reinvested in a more advantageous market environment where higher rates should be available.

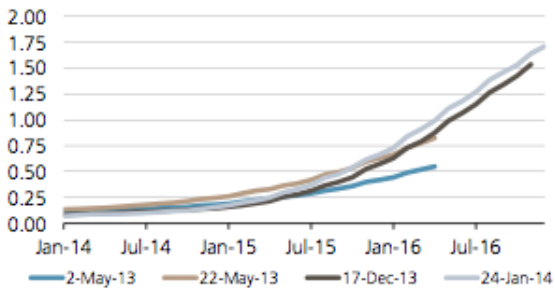
Finally a practical example

As a reward to anyone still reading this report, we will finally put aside theory and engage in a practical exercise involving different callable structures in the current market environment. So first, please recall that we stated that these securities should be preferred in a bearish rate environment. A logical first question should then probably be, is that what the market is expecting? A likely second question might be, is that what we are afraid of?

Hopefully by now it is well understood that the UBS CIO WMR baseline prediction is for rates to rise. Indeed we think that the generic interest rates markets are transitioning from a three decade long bull market to a secular bear market. With regard to timing, our expectation is that the Fed will start hiking rates in 3Q2015, which is roughly consistent with the Fed's forward guidance. The exhibit suggests that at least some component of the market has its doubts about how long the Fed can afford to wait before it begins tightening.

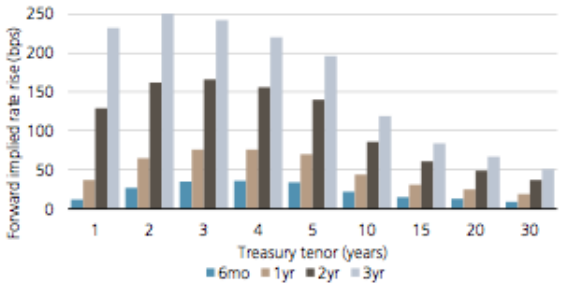
We see the same signal in Treasury market forward rates. So for the sake of our exercise, let's assume that we agree that rates will rise. Further, let's assume that we think rates will rise even more than what the market implies. Thus, we are motivated here to consider alternatives in

Fig. 1: Fed funds futures impute higher rates...



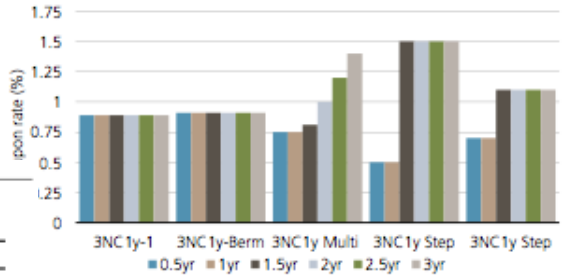
Source: UBS CIO WMR, Bloomberg

Fig. 2: ... and so do Treasury forward rates



Source: UBS CIO WMR, Bloomberg

Fig. 4: Callable coupon schedules



ırce: UBS CIO WMR, Bloomberg, Yield Book

Fig. 3: Our universe of callable alternatives

Agency callable	Coupon	YTM	YTC (1yr)
3NC 1y-1x	0.89	0.89	0.89
3NC 1y Berm	0.91	0.91	0.91
3NC 1y Step up	0.75 / 0.75 / 0.81 / 1.00 / 1.20 / 1.40	0.97	0.75
3NC 1y Step up	0.50 / 1.50	1.17	0.50
3NC 1y Step up	0.70 / 1.10	0.97	0.70
Treasury (1yr)		0.10	
Treasury (3yr)		0.76	
Treasury (comp dur)		0.57	

Source: UBS CIO WMR, Bloomberg, Yield Book; indicative only, as of 1/23/14

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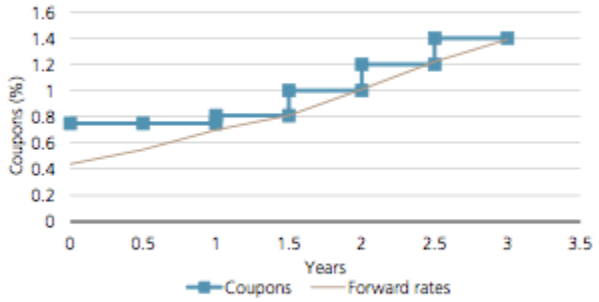
the agency callable bond market, including both fixed rate and step up structures.

Specifically, we'll compare two fixed rate callables with three step up callables, all provided by our trading desk in Stamford as roughly par priced alternatives.

To illustrate how the step up note compares to the forward rates, we chart the coupon schedule of the multiple step up callable versus the one-year agency bullet forward rate curve. We model our par-priced, new issue callable structures and perform total return analysis under a range of parallel interest rate shocks using the standard methodology (i.e., immediate shocks to rates, constant OAS, using the term structure of volatility) over a one-year horizon.

Fig. 5: Step up coupons versus forward rates



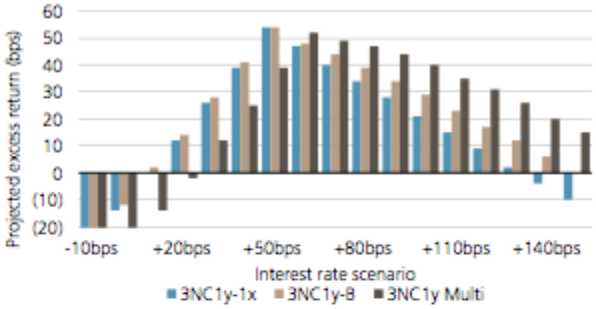
Source: UBS CIO WMR, Bloomberg, Yield Book

Fig. 6: Projected excess total returns versus comparable duration non-callable notes, in basis points

	Unch'd	+10bps	+20bps	+30bps	+40bps	+50bps	+60bps	+70bps	+80bps	+90bps	+100bps	+110bps	+120bps	+130bps	+140bps	+150bps
3NC1y-1x	-14	0	12	26	39	54	47	40	34	28	21	15	9	2	-4	-10
3NC1y-8	-12	2	14	28	41	54	48	44	39	34	29	23	17	12	6	0
3NC1y Multi	-27	-14	-2	12	25	39	52	49	47	44	40	35	31	26	20	15
3NC1y Step (50/150)	-41	-28	-16	-2	11	28	42	51	59	67	67	60	51	42	32	22
3NC1y Step (70/110)	-32	-19	-7	7	21	34	47	52	49	45	40	35	30	24	18	13

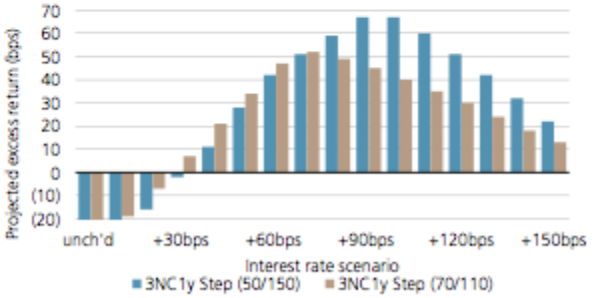
Source: UBS CIO WMR, Bloomberg, Yield Book

Fig. 7: Step ups perform best when rate rise



Source: UBS CIO WMR, Bloomberg, Yield Book

Fig. 8: The choice of coupons matters



Source: UBS CIO WMR, Bloomberg, Yield Book

This analysis confirms the general statements we made earlier. Namely, the excess returns versus a comparable duration Treasury note form the stereotypical umbrella shaped ranges of relative outperformance that we are accustomed to seeing.

As predicted, when we compare the excess return umbrella of the fixed rate callables and the step up note, we see how the outperformance range of the step up is noticeably shifted "to the right," i.e., the best relative outperformance occurs in the higher rate environments. Comparing the excess returns of the different step up structures also lends insight into why different investors might prefer a particular front-end/back-end coupon structure.

For example, note how the excess returns of the step up with the lower initial coupon are relatively better than the step with the higher initial coupon in the higher rate scenarios. Thinking back to our analogy of step ups and

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insurance against rising rates, recognize that a lower initial coupon is the trade-off for a higher back-end coupon. And the higher the back-end coupon, the higher the likelihood of call. If the note is called and the back end coupon is lost, then the investor should hope for a higher rate environment so that the redemption proceeds can be attractively reinvested.

Conclusions

So what have we learned? First and foremost, we know that callables have their best relative performance when rates are range bound with regard to the forwards. More specifically, our best relative per- formance should be when rates evolve to the forward rates, assuming call date coupons are consistent with the forwards.

So within the context of choices that involve Treasury notes, agency bullets and callables (assuming efficient pricing, and ceteris paribas), the investment decision matrix can be summarized in the following.

- If we believe that rates will fall significantly, then we should overweight bullets.
- If we believe that rates are likely to trade a range, then we should overweight fixed rate callables.
- If we believe that rates will rise significantly (i.e., more than what the forwards imply), then we should prefer step up callables.
- If we believe that rates will spike dramatically higher, then we should underweight callables.

In a nutshell, respect The Umbrella. That is to say, the typical chart of callable notes' excess returns under parallel rate shocks should resemble an umbrella. It shows a range of outperformance that includes several scenarios in both falling and rising rates in which callables are projected to outperform bullets. All else equal, if our expectations for rates are in the range of outperformance, it makes sense to look to the callable bond market for potential total return outperformance.

Term / Abbreviation	Description / Definition
Bullet	A bond that is not callable.
Callable	A condition of a bond permitting the issuer to redeem it, before maturity, on specified dates at specified prices. Bloomberg abbreviates callable as CALL.
Carry trade	A carry trade is a strategy in which an investor borrows money at a low interest rate in order to invest in an asset that is likely to provide a higher return.
Effective duration	A duration calculation for bonds with embedded options. Effective duration takes into account that expected cash flows will fluctuate as interest rates change.
Lockout	The number of days prior to the end of a coupon accrual period where the current rate is not subject to reset..
Modified duration	The percentage price change of a security for a given change in yield. The higher the modified duration of a security, the higher its risk. Ad/ModDuration = [duration / {1 + (IRR/M)}]; where IRR is the internal rate of return and M is the number of compounding periods per year.
Option adjusted spread (OAS)	OAS is a methodology using option pricing techniques to value the imbedded options risk component of a bond's total spread. Imbedded options are call, put or sink features of bonds.
Par priced	1) When the market value of a security is equivalent to its face value. A bond with a face value of $1000 is at par when it is selling or being redeemed for $1000. 2) One hundred percent of the principal value of a debt instrument.
Volatility	The relative rate at which the price of a security moves up and down, found by calculating the annualized standard deviation of daily change in pricel.

Source: Bloomberg, UBS as of 1 March 2013

Appendix

Global Disclaimer

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FUN FACT$

- During fiscal year 2013, the Bureau of Engraving and Printing produced approximately 26 million notes a day, with a face value of approximately $1.3 billion.
- Currency is actually fabric composed of 25 percent linen and 75 percent cotton. Currency paper has tiny red and blue synthetic fibers of various lengths evenly distributed through out the paper.
- The first paper notes were printed in denominations of 1 cent, 5 cents, 25 cents, and 50 cents.
- The $2 bill first originated on June 25, 1776, when the Continental Congress authorized issuance of the $2 denominations in "bills of credit for the defense of America."
- Martha Washington is the only woman whose portrait has appeared on a U.S. currency note. It appeared on the face of the $1 Silver Certificate of 1886 and 1891, and the back of the $1 Silver Certificate of 1896.
- Though it would be difficult to tell without a magnifying glass, the hands of the clock in the steeple of Independence Hall on the back of the $100 bill are set at approximately 4:10.
- Over 90 percent of U.S. currency is Federal Reserve notes.

WHO KNEW?

The End Of Quantitative Easing

PREPARED BY DR. DONALD RATAJCZAK, PHD[1]

This month the Fed will end its expansion of holdings in treasuries and mortgage backed securities. What was achieved and should such purchases become a regular tool used by central banks? Is there an optimum size to a central bank's portfolio and what dictates that? If it is a special instrument to aid economic recoveries, should it be downsized when expansion is above trend growth rates as I am projecting for more than seven quarters following the second quarter rebound? It is too early to answer all of these questions, but I would like to outline some of the accomplishments and problems with this instrument.

I believe most economists applauded the initial use of security purchases by the Fed. Banks were struggling to rebuild their capital and improve the quality of their loan portfolios. Expanding their loan portfolios was secondary to these other objectives. I believe the Fed correctly felt that using traditional channels of providing liquidity to banks would not lead to the growth of economic activity that was desired. While banks were slow to expand their loan portfolios, the expansion of the Fed's investment portfolio would put the liquidity directly into the investment community. Underwriting scrutiny was lost, but improving asset prices was accomplished. This was especially important when real estate prices were unusually low and equity values did not reflect the earning power of U.S. corporations. At some point, those enhanced asset prices would create increased economic activity. They might also improve the collateral value of loan portfolios, thus indirectly improving the strength of the banking system.

I believe most economists applauded the initial use of security purchases by the Fed.

We can debate whether the improvement in housing values was fully justified. To be sure, housing values remain well below their peak, on average, but the peak was, in my estimation, a 35% distortion from reality when it occurred. Seven years after that peak, the modest inflation we have experienced probably justifies another 20% improvement in "normal" real estate values, but that still would mean values should be about 15% below their peak levels. In fact, they are now about 84% of their peak according to the Case-Shiller index of prices in 20 metropolitan areas, and their improvement is slowing to less than 6%. My guess is that those prices will grow about 4% next year and then follow inflation until some credit distortion develops. In my analysis, housing is priced where it should be, though the sluggish growth in household formations remains a concern.

Although the Dow has recovered remarkably from the 6,600 level at the depths of the bear market, only now are the valuations exceeding historical norms relative to earnings (though the profit margins are historically high and might not be sustainable). The 32% gain in last year's S&P removed a 27% valuation gap that had been slow to close. (In 2011, stocks struggled despite obvious gains in earning power.) Blanchard at the IMF has called stock values "frothy" and even Janet Yellen has worried about valuations in a few sectors. I understand their concerns, but do not yet see the "exuberance" that normally precedes a major stock market correction (though one has occurred in the emerging markets, where PE's have gone from 20% above U.S. levels to nearly 20% below in the past two years).

My methodology now shows excess valuations for U.S. equities, but this "froth" is what normally creates modest corrections, not a new bear market. Moreover, recent data revisions for profits have been large, which means the excesses could disappear with the next annual correction in profit estimates.

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To the extent that quantitative easing was expected to raise asset values to "normal" levels, it has done its job. That economic growth has been slow to respond should not be surprising because the channels to growth were through asset valuations, not bank loan activity. Therefore, a return to more normal channels of monetary stimulus is warranted. If asset prices become "frothy", a case for shrinking the Fed portfolio would arise, but I do not see such a need at this time. Indeed, I would now expect the current size of the Fed portfolio to remain largely unchanged for "a considerable period of time." (Certainly into 2016, if asset prices do not surge.)

I will now make my assessment of what was achieved. Asset pricing now adequately reflects normal U.S. economic conditions. Economic growth is improving, but more because of the removal of fiscal drags than monetary stimulus. I see quantitative easing as a tool needed in bank crises, but not a regular instrument to offset bad budgetary policy (though that also is what happened). In short, it should be used sparingly.

The Fed has substantially added interest rate risk to its portfolio. So far, investors are not concerned that a negative net worth for the Fed is possible sometime in this cycle. Of course, actual losses can be avoided by just allowing the portfolio to mature. However, I believe the Fed must now monitor asset pricing as well as economic conditions, and that is very difficult.

The optimum size of the Fed's portfolio depends upon the valuation of assets held by investors. As the Fed buys assets from investors (treasuries and mortgage backed securities), those investors will replace those securities with other assets. If the value of those assets no longer reflects underlying economic conditions, then the Fed is purchasing too much. I am not sure the Fed understands this new responsibility, which could cause problems over time. If equities are "frothy", as Blanchard claims, then the Fed portfolio is too large. I believe he is nearly right, but do not object to the current size of the portfolio if normal performance returns to asset markets, as they have in the emerging world and in housing prices.

In other words, quantitative easing is a brilliant crisis tool, but should not be used when normal conditions return. Because quantitative easing channels bypass risk underwriting in banks, excesses are more likely. In short, getting out of further portfolio expansion at this time is correct (or maybe even a little late). And using quantitative easing to offset budgetary austerity ultimately is distortive, though I understand why central banks would like to do so.

Finally, will interest rates rise now that the Fed no longer is a net bond buyer? There is no question that bond prices will be lower than they otherwise would be. Whether that means they actually fall or only rise more slowly depends upon the sources and uses of funds.

Internal sources of funds are growing faster than uses into the winter. The need to attract international funds continues to diminish until then. However, pressures then rise sharply in the spring, about the time the Fed will begin raising short term rates. While the whole curve, which continues to flatten into the winter, will shift up in the spring, it also will become steeper.

Of course, the international flows are more than ample to meet our needs at unchanged interest rates. A surge in the dollar is actually attracting more funds than needed. Until the dollar declines or Europe shows substantial growth (neither of which appears near at hand), international flows will put downward pressures on rates. Indeed, long rates could fall through the Fall. I am assuming modest increases in those rates during the winter and then further gains in the spring at the end of which the Fed should be allowing short rates to rise.

[1]"The End of Quantitative Easing" was prepared by Dr. Donald Ratajczak, PhD., Raymond James & Associates, Inc., Fixed Income Consulting Economist. This report is a transcript of comments made by Dr. Ratajczak and should be read in that context. Additional information is available upon request.

GIOA
Government Investment Officers Association

Win, Lose, or Draw: Do the GSE Lawsuits Even Matter?

RYAN GRAF, SENIOR VICE PRESIDENT, U.S. RATES STRATEGY

Late on September 30th, the U.S. District Court for the District of Columbia dismissed a series of lawsuits filed against Treasury, FHFA (Federal Housing Finance Administration), and the GSEs by several plaintiffs including hedge funds Perry Capital and Fairholme Funds. The dismissal was a blow to the cases but is hardly the end of the line. The lawsuits are likely to drag on for months or years as both sides dig in. Even if the plaintiffs win, one has to ask: does it even matter? We believe that it does not. No matter the lawsuits' outcome, we think the GSEs' common and preferred shareholders are in for disappointment.

No matter the lawsuits' outcome, we think the GSEs' common and preferred shareholders are in for disappointment.

The Best Case Scenario

The best case scenario for GSE common and preferred equity holders is that the lawsuits successfully overturn the net worth sweep dividend and the GSEs ultimately generate enough profits to extricate themselves from government ownership. Even if the lawsuits are successful in overturning the net worth sweep, there are still many other problems that stand in the way of the common and preferred shareholders getting any money let alone the GSEs getting out from under government control.

Core Earnings May Not Be Enough to Pay a 10% Dividend

The first problem is that the GSEs' may struggle to generate enough earnings to pay the 10% dividend. For two companies that earned $133 bn in 2013, this may seem odd. However, the problem is that earnings in 2013 and the first half of 2014 were elevated by one-time items such as the release of the deferred tax asset allowance, releases of loan loss reserves, and MBS litigation payments.

- To better see the true picture, we adjusted the GSEs' first half 2014 earnings to remove these one-time items.
- In addition, we also added back fair value losses on derivatives. These have a large effect on headline earnings but are not indicative of the true strength of the core business lines.
- After these adjustments, combined core net income came to $9.2 bn versus headline net income of $14.4 bn as seen below.
- On an annualized basis, the adjusted numbers would leave Fannie Mae unable to fully pay a 10% dividend while Freddie Mac would barely make the cut.
- The issue going forward is that the GSEs' portfolios are mandated to decline by 15% per year until they reach $250 bn. Since the portfolios have historically been the largest driver of net income, this is quite negative for future earnings.
- A bright spot is that guarantee fees have been rising. For example, Fannie Mae's average guarantee fee on new business acquisitions in Q2:14 was ~63 bp versus an average in 2009-11 of 26 bp.[1]

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Adjusting H1:14 Net Income

$bn	FNMA	FHLMC	Total
H1:14 Pre-Tax Net Income	13.3	7.8	21.1
Less: Benefit (Provision) for Credit Losses	2.4	0.5	2.9
Less: MBS Litigation Payments	4.2	4.9	9.2
Less: Investment Gains (Losses)	0.6	0.6	1.2
Less: Fair Value Gains (Losses) on Derivatives	(2.1)	(4.3)	(6.4)
Adjusted Pre-Tax Income	*8.2*	*6.0*	*14.2*
Estimated Taxes on Adjusted Income	*(2.9)*	*(2.1)*	*(5.0)*
Adjusted H1:14 Net Income	***5.3***	***3.9***	***9.2***
H1:14 Reported Net Income	**9.0**	**5.4**	**14.4**
Annualized Adjusted Income	***10.7***	***7.8***	***18.5***
Original 10% Dividend Requirements	11.7	7.2	18.9

Source: FNMA and FHLMC 10Qs, Mesirow Financial; Notes: Investment gains reflects the combined effect of other-than-temporary impairments of AFS and other investment gains. Assumes 35% tax rate for estimated taxes. Numbers may not sum due to rounding.

- While increased guarantee fees will help offset some of the loss of income from the portfolio, we think it will be difficult to fully offset it while also generating incremental revenue.

Paying Back the Government's Stake is Unlikely

The net worth sweep dividend made it impossible for the GSEs to get out from under government control since they could not build up capital, but the hope is that overturning it will make this a possibility again. While the GSEs' net worth would be significantly higher absent the sweep, it is unclear how the money from the "excess" dividends would find its way back to the GSEs.

- One possibility is that Treasury simply sends the money back to Fannie Mae and Freddie Mac. However, refunding dividends paid would be politically difficult.
- Another unlikely possibility is that the "excess" dividends would reduce the government's stake. In our reading of the Preferred Stock Purchase Agreements (PSPAs) however, Treasury would have to agree to this which is unlikely.
- The idea of hedge funds profiting on the GSEs' equity is probably even more politically unpalatable than Treasury sending money back to the GSEs.
- More likely than either of these scenarios is one in which the GSEs book the "excess" dividends as a prepaid expense or something similar allowing them to forgo paying dividends for a time. This idea would be more politically palatable since no money would have to flow from Treasury to the GSEs, and Treasury's stake would not be reduced.

GSE Net Worth if 10% Dividend Was in Effect

$bn	FNMA	FHLMC	Total
6/30/14 Net Worth	6.1	4.3	10.4
"Excess" Dividends Under Net Worth Sweep	77.8	51.7	129.4
Adjusted Net Worth at 6/30/14	83.9	56.0	139.8

Source: FNMA and FHLMC 10qs/10ks, Mesirow Financial

Estimated Cost of a 10 bp G-tee Fee

$bn	FNMA	FHLMC	Total
Size of Guarantee Book (8/31/14)	2,785	1,639	4,424
Amt of Debt Outstanding (8/31/14)	494	447	941
Total Liabilities Subject to Fee	3,279	2,086	5,365
Cost of 10 bp Annual Fee	3.3	2.1	5.4

Source: FNMA, FHLMC, Mesirow Financial

The Commitment Fee Could Return

Another problem facing the GSEs is the commitment fee. The commitment fee was a provision in the original PSPAs that was "intended to fully compensate [Treasury] for the support [they] provided.[2]" The fee was waived temporarily every year until the August 2012 amendment waived it permanently.

If the sweep was overturned, we think the commitment fee would be implemented. The reason the GSEs were able to operate the guarantee business with so little capital for so long was because of the government's implicit support. Moreover, that support is the only reason they are still operating today.

Such a fee could easily run several billion dollars per year or more. For example, a fee of 10 basis points levied on the GSEs' mortgage guarantees and outstanding debt would cost ~$5 bn per year. With the GSEs struggling to pay a 10% dividend from core earnings, another fee would likely be the final nail in the equity holders' coffin.

Conclusion

While many possible outcomes exist for the GSEs in the future, we think the odds of the outcome being positive for the equity holders are very low. The GSEs will probably struggle to fully pay a 10% dividend let alone an additional commitment fee. On top of that, Treasury is unlikely to allow "excess" dividends to be used to reduce their stake in the GSEs. In our view, the combination of these factors paints a very bleak picture of the future for the GSEs' common and preferred shareholders.

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Footnotes

[1] See page 29 of FNMA's Q2:14 10q as well as previous 10ks and 10qs. The 63 bp includes the impact of a 10 bp fee increase mandated by the Temporary Payroll Tax Cut Act of 2011 (TCCA) which must be remitted to Treasury. The period from 2009-11 was before the push to raise guarantee fees as well as being prior to the TCCA fees being implemented.

[2] See the PSPA document from September 2009. http://www.treasury.gov/press-center/press-releases/Documents/seniorpreferredstockpurchaseagreementfrea.pdf

What could end the bond bull market?

BILLY SCHMOHL, VP – INVESTMENT INFORMATION, ALAMO CAPITAL

People love junk. Ever since the Fed reduced the Federal Funds rate to between 0 – 0.25% six years ago, high yield fixed income markets have been flourishing. Matched with active bond buying programs from central banks around the world, the accommodative monetary policies domestically and abroad have sent investors flocking to junk bonds. High grade markets, such as U.S. Treasuries, have been shunned by many investors, as they fear that the yields may fail to keep pace with inflation. Despite the high demand for fixed income products, many have falsely predicted the end of the bull market in bonds. Pullbacks in bond prices have presented appealing opportunities for investors over the past six years, and we encourage investors to focus on relative value across the yield curve.

Minding the Fed

Central banks have been manipulating credit markets at an unprecedented pace. While it may worry some, the activities continue because they have been overwhelmingly successful. Domestically we have seen the accommodative monetary policies help stimulate economic growth, reduce unemployment, spur inflation, and increase asset prices. Across both ponds, central banks have adopted similar monetary policies, and are hoping for similar results. While these programs must end eventually, many central banks are more likely to be more

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accommodative than restrictive, particularly with the slow growth and deflation fears abroad. The U.S. is likely to become more restrictive before foreign central banks due to the health of the U.S. economy. However, they produce a plethora of accommodative language upon any sign of economic weakness. The Fed remains very focused on the employment market, which has made substantial gains, but still requires significant improvement to get to full employment. Wage growth remains anemic, and underemployment is far too high. Effectively, the language out of the Fed makes bad news good news, and good news bad news, based on the prospective impacts a given variable could have on monetary policy.

Geopolitical Risk

Military conflicts across the Middle East and Eastern Europe made "geopolitical risk" a popular buzzword over the summer. Surely, these events would scare investors, and create a flight to quality over junk bonds. July and early August experienced a pullback in fixed income markets, only for them to come roaring back. Investors who jumped on the opportunity were well rewarded. Based on historical values, bond markets could inevitably revert to their mean levels; however, current levels are well supported from a fundamental perspective. It would likely require an unprecedented event to create an end to the fixed income bull market. Certain unprecedented events, such as accommodative monetary policies and various military conflicts, have influenced markets, but investors continue to pile money into debt markets.

Relative Value

The future is unknown, though relative value is certain. While 10-year Treasuries may not be particularly appealing around 2.2%, they become remarkably appealing compared to the 10-year German Bund yielding below 1%. Then compare both to the MMD BAA tax-free municipal bond curve, where the 10-year is yielding around 3%; and it becomes rather clear that favorable value is in municipal debt. Along the yield curve, we are recommending that total return investors seek value in the 6-12 year range. From a credit quality perspective, we are seeing the best values in the Baa2 – A1 range from Moody's, and the BBB – A range from Standard & Poor's. Regardless what the yield environment presents, your Alamo Capital fixed income representative specializes in helping you find relative value in the context of the broader market.

FUN FACT$

- The motto "In God We Trust" did not appear on Federal Reserve notes until 1963.
- The approximate weight of a bill is one gram. Since there are 454 grams in one pound, there are 454 notes in one pound.
- A stack of currency one-mile high would contain more than 14.5 million notes.
- The U.S. Secret Service was created during the Civil War to fight counterfeiting.

WHO KNEW?

S&P Defends Higher Municipal Credit Ratings

LIZ FARMER, GOVERNING

As rating agencies, following the financial crisis, have sought to maintain their credibility, the divergence between the ratings that those agencies have doled out to governments has increased. Over the last year the number of issuers that have one rating from Moody's Investors Service and a different one from Standard & Poor's (so-called split ratings) has increased to nearly half, or 46 percent of all investment-grade rated municipal bonds.

Much of the focus has been on S&P, which over the past year has upgraded about 1,600 local governments' ratings as it has applied its new scoring criteria. An upgrade means those governments will likely get a more favorable interest rate on their bond sales than they did in the past, ultimately helping that government save money on borrowing costs. S&P's shift toward higher ratings have drawn skepticism from some observers. But the agency's analysts this week said the higher level of upgrades are simply because after they took a peek under the hood, the local government sector is doing better than analysts initially thought.

Of the roughly 4,000 local governments S&P re-evaluated over the past year, 41 percent received a ratings upgrade, 55 percent received the same rating and 4 percent received a downgrade. S&P initially predicted a more negative picture before it started its reviews – analysts figured only one out of every three governments would get an upgrade while 10 percent would be downgraded. The unpredicted level of upgrades was largely due to the fact that initial predictions were based on old financial and economic data and didn't include any of the more subjective components of S&P's scoring criteria, said analyst Chris Krahe.

Over the last year, the credit agency upgraded 41 percent of local governments' ratings, drawing skepticism from some.

"Management is a key piece," Krahe said in a webcast presentation regarding the conclusion of the ratings re-evaluations. "We had conversations with management teams and those discussions bring about insights about plans they have, expectations for future years, [and so on]. That's a very key part of the qualitative analysis we took into account…that was not part of the initial predictions."

Better information also played a role, he added. Many of the unpredicted upgrades were due to things like getting new audited information or updated economic figures.

The ratings criteria had been tested and went through a public comment period in the year before S&P began using it to re-evaluate its government ratings. The new criteria scores municipalities in seven categories: management, economy, budgetary flexibility, institutional framework (governance), budgetary performance, liquidity and debt/liabilities. The score for economy counts for 30 percent of the total score; all other categories are given a 10 percent weight. Key changes in the scoring criteria included giving more weight to the local economy score and adding more factors to the management score to take into account performance under financial stress.

Meanwhile, counterpart Moody's is issuing more downgrades than upgrades and it's leading some to question S&P's tack. In July, Janney Montgomery Scott issued a fiery note that wondered whether the divergence in ratings would lead to governments only publishing their

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best rating, a practice known as ratings shopping.

"I do not remember a time when I saw so many credits with not just a one-or-so-notch difference here and there, but multiple-notch differences in some cases," Tom Kozlik, the analyst who wrote the note, told Governing at the time. "This is not part of the typical ratings cycle, where sometimes one rating agency is a little higher and vice versa."

Struggling governments have certainly grabbed the headlines but S&P this week reiterated its view that the local government sector as a whole is "strong and stable" with a historically low default rate. Therefore, the agency's ratings reflect that strength. The ratings upgrades generally resulted in a percentage shift from government credits that S&P had previously rated in the single-A category moving up into the double-A category. (The triple-A category, the highest rating, also saw an increase in the number of governments that S&P qualified for that tier.) The portion of governments S&P rated at triple-B or lower (junk status) stayed the same.

"We don't want to appear unaware that there are pockets of stress that could occur," said analyst Lisa Schroeer. "But we wanted this framework to be written in a way that doesn't penalize the entire sector."

Others agree. "As an asset class, municipals have an extremely low default experience, higher ratings are better supported by the data," said the Aug. 25 issue of Municipal Market Advisors' weekly research brief (emphasis included). The brief added that S&P's approach to scoring governments' credit is more forward-looking than Moody's, which accounts for some of the divergence between the two.

Now that S&P has reevaluated its local credits, it plans on using the new data it has to issue more reports that look at broader themes and trends in local government.

Federal Reserve (Fed) Monetary Policy and the Economy: The Minimum Investor Watch List

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Fed Monetary Policy Update

Monetary policy has never been more transparent than it is today. The Fed provides a statement on the economy and its monetary policy position after each of its Federal Open Market Committee (FOMC) meetings. The Fed regularly forecasts details on the growth of the economy, its inflation outlook and interest rate/bond yield projections for years into the future. Three weeks after the eight FOMC meetings held throughout the year, the Fed publishes minutes of those meetings.

The September 2014 FOMC statement, minutes and forecasts indicate that the overall position of the Fed implies lower short-term interest rates for as long as it takes to achieve its mandates for full employment, contained inflation of 2 percent and stable financial market conditions. The Fed continues to make it clear that 2 percent inflation and full employment, broadly defined as an unemployment rate between 5.2 percent and 5.5 percent, must be satisfied before considering a monetary policy change involving higher short-term interest rates.

Given the current level of very low rates, it is clear that the Fed intends to avoid the mistake of increasing short-term interest rates while the economy is fragile and the expansion is in doubt of continuing or is vulnerable to stagnation. Raising rates too soon would be unworkable because a reversal of policy would leave few tools left to restart the economy.

What the Fed Watches

There are several key indicators investors should follow when

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determining when the Fed might alter monetary policy. A good place to start is to watch the Personal Consumption Expenditure Deflator Index, which is released each month with the Personal Income and Spending data. It has been below the Fed target of 2 percent for more than 20 months. Also, the Consumer Price Index reaching 2 percent is a good source to confirm accelerating inflation.

The best leading indicators for inflation are commodity prices and wage growth. Higher commodity prices indicate stronger economic growth, and that growth will continue with increasing inflation risk. Rising wages are proof of diminishing job market slack and underutilization of plant and equipment. Wage expenses are over 70 percent of the cost of production for most companies, and comprise an even higher percentage for government entities. Rapidly rising wages would suggest the risk of substantial cost push inflation and encourage consumers to spend aggressively before prices increased.

Required Reading for the Economy and the Fed

Finally, consider the Wall Street Journal's Federal Reserve analysis of the Fed and pay particular attention to the columns written by Jon Hilsenrath. He is reportedly the Fed's conduit for official Fed market message clarification to the financial markets, if the Fed sees its official communications have been misinterpreted.

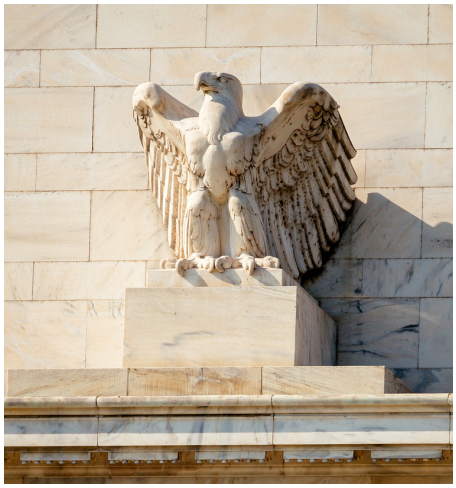
Economic Sector Review

Reviewing the four large sectors of the U.S. economy produces few clues for acceleration in economic growth that would cause a surge in wage gains, economic growth or inflation. Consumers remain debt-laden, even though low interest rates for some forms of credit (housing and autos) have spurred activity and improved cash flow. Consumers remain unable to increase spending at a faster rate than current personal income growth. Stagnation in median income gains in the recovery have kept consumers rotating their spending; money is spent on cars, clothes, gasoline and food, but consumers are unable to spend their money simultaneously in these areas. Businesses have been reluctant to hire aggressively, with sales visibility and growth uneven month-to-month and profit margins under relentless pressure. Profits have never been higher, but the memories of the Great Recession of 2008 are still fresh, making financial safety paramount. Governments are reducing deficits and providing less support for the economy. Global growth has begun to slow, especially in Brazil, China and Europe. None of the four sectors seem capable of spurring acceleration in U.S. economic growth. The consumer sector is the largest and most important and still under income constraints and tight credit conditions.

All this translates to lower interest rates for much longer than popular opinion would lead us to believe.

Money Market Fund Reform

For the second time, the SEC has announced money fund reforms in an attempt to reduce the potential need for a taxpayer bailout in a future financial crisis. When the new rules take effect in about two years, institutional prime and institutional municipal money market funds



will be required to sell and redeem shares at a floating Net Asset Value (NAV) based on the current market-based value of the securities in their underlying portfolios, rounded to the fourth decimal place (e.g. $1.0000). The Treasury and the Internal Revenue Service are likely to allow investors to use simplified accounting to track gains and losses and provide relief from certain "wash sale" rules. Mercifully, government, treasury, retail prime funds and retail municipal money market funds will continue to be able to transact at a stable $1.00 NAV and use amortized cost and/or penny rounding to seek to maintain this stable share price.

The most troublesome reform is the potential for the implementation of liquidity fees if a fund's level of liquid asset falls below 30 percent. Currently, fees are required if a fund's level of such assets falls below 10 percent. The possibility of these fees is likely to make vigilant institutions more likely to exit the funds at the first whiff of problems.

The end result is very likely to push institutional accounts into Treasury money funds and the banks. There is no reason to take risk with cash for any potential gain in the current interest rate repression period.