

# GIOA Update

Spring 2018

NEWS from the GOVERNMENT INVESTMENT OFFICERS ASSOCIATION



The Government Investment Officers Association would like to invite you to participate in our 14th Annual Conference at the Luxor Casino Resort March 21-23, 2018 in Las Vegas, Nevada.

All day Pre-Conference Workshops open our event for government members only on Wednesday, March 21st, and a Welcome Reception for all attendees begins Wednesday evening. The main sessions run all day Thursday,

March 22nd and conclude Friday, March 23rd at 12pm. Thursday evening will feature a NCAA Basketball Party. NASBA eligible CPE credits will also be offered for assigned sessions.

## CGIP Update

Nicole Muegge Thurston County

Success is worth celebrating. We are excited to be celebrating additional certificate holders of the Certified Government Investment Professional (CGIP) designation. The CGIP program is proud to announce that we will recognize 19 graduates at this year's GIOA conference. Each graduate is recognized for completing 20 courses of education, along with a final exam, which demonstrates gaining the knowledge and expertise to effectively manage monies as a government investment professional. Join us in congratulating the following individuals:

Nicole Muegge	Thurston County Treasurer's Office, WA
John Faltin	Idaho State Treasurer's Office
Rick Tollackson	Yakima County, WA
Ash Benzo	City of Fort Lauderdale, FL
Brian Stubbart	Merced Irrigation District, CA
David Shank	San Diego County Water Authority, CA
Eric Adachi	San Diego County Water Authority, CA
Chao Wei	

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In an ongoing effort to expand and enhance the CGIP program, GIOA has formed an online education committee and we are currently seeking candidates that have a strong interest in influencing the practice standards of government investment officers nationwide.

The benefits of being a member of the committee include:

- Ability to provide input regarding continuing education related to the CGIP certification
- Plan and organize promotional opportunities for the CGIP program
- Participate in recruiting potential candidates for the CGIP designation
- Commitment includes monthly conference call to discuss items related to committee responsibilities.

Responsibilities and expectations of members include:

- Participates in monthly conference calls
- Provides input regarding continuing education related to the CGIP certification
- Assists in planning and organizing promotional opportunities for the CGIP program
- Helps identify recruiting opportunities for the CGIP designation

If you or someone you know would be a good fit for this committee, please submit name, contact information, and reason for interest to Nicole Muegge, Education Committee Chair at [mueggen@co.thurston.wa.us](mailto:mueggen@co.thurston.wa.us).

Also, as always, whether you are currently enrolled, graduated, or considering the program, I want to hear from you. As you consider the CGIP designation, or as you study and work towards the designation, I am here as your advocate. I would love your questions and feedback. Drop me an e-mail me anytime or give me a call at 360-786-5144.



Fri, Mar 16, 2018 10:00 AM – 10:30 AM PDT  
Meeting Link:  
<https://global.gotomeeting.com/join/858083253>

You can also dial in using your phone.  
United States: +1 (646) 749-3112

Access Code: 858-083-253

<http://www.gioa.us/cgip/>

# 4 Benchmarks to Consider for Managing Investment Data

Ben Christensen, Corporate Treasury Market Specialist, Clearwater Analytics

Last year, treasury and investment accounting professionals were surveyed on the strategies and processes they utilize to manage investment data. The compiled information provides a useful snapshot of the current common approaches to investing by entities in the government and institutional space.

The Government and Institutional Investment Survey, conducted by Clearwater Analytics, explores challenges common to investment professionals working for governments and institutions: constituent transparency, shifting regulatory requirements, investment compliance policy monitoring, and pressure to provide accurate and timely information to stakeholders, to name a few. Survey respondents included accountants, directors, and other treasury and investment professionals.

The survey asked questions relating to three primary subjects: demographics, time and processes, and challenges. The data provide a variety of insights that can be utilized for industry benchmarking. For instance, some examples of the data include:

- 32% of investment finance or accounting teams have eight or more people, while 31% have teams of one or two
- The period-end close process takes at least four to seven days, sometimes more than four weeks, for 78% of respondents
- 45% of respondents listed GASB 68 as the most difficult report to complete

The data also tells us how governments and institutions are utilizing technology for things like reconciliation and report creation.

A brief analysis of the following four topics is based on the survey data.

## 1. Growth vs. Scalability

As shown in the following graph, team size was primarily divided between small and large, with most respondents working on teams of one to two, or eight or more. Both groups included those at organizations with large portfolios of more than \$5 billion.

For team size, governments and institutions are choosing between two distinct strategies: growing or scaling. Growing team size simply means adding personnel to overcome new challenges. Scaling, on the other hand, is achieved by leveraging tools and technology to do more work without

adding staff. With respondents managing such large and seemingly complex portfolios with teams the fraction of the size as others, it is clear that many organizations are successfully implementing tools to achieve true scalability.

## 2. Automated Processes vs. Manual Processes

Of those surveyed, 39% no longer rely on spreadsheets and manual data entry for investment reporting, with the majority using some type of technology for automation.

The other 61% still rely on manual spreadsheets and data entry. An overwhelming 90% of that group rely on custodian and asset manager data to aggregate and reconcile data, and then calculate accounting entries, which can slow reporting and period-end close times.

## 3. Period-End Closes

More than 50% of respondents take longer than a week to close their books at period-end, and 17% require more than a month to close. Long and cumbersome close processes are a hallmark of manual investment data aggregation and reporting. Leveraging automated technology can be a key tool to help gain efficiencies.

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#### 4. Interperiod Reporting

Having daily access to investment policy compliance status, portfolio risk exposure, and overall performance metrics provides transparency for constituents and stakeholders, especially during times of market volatility. However, 73% of those surveyed do not provide interperiod reporting.

#### Best Practices Through Benchmarking

Industry benchmarking is an important practice for governments and institutions dedicated to improvement. By comparing their processes, strategies, and common challenges against those of their peers, investment professionals will be empowered to implement change. At a time when technology is revolutionizing how organizations are managing, analyzing, and effectively leveraging their data, treasury professionals benefit from participating in the conversation around operational best practices and solutions.

Of course, industry standards are constantly evolving due to a variety of market and industry factors. That is why regular industry benchmarking is so important. Surveys like the one conducted by Clearwater provide annual benchmark data that can help treasury and investment accounting professionals do their jobs more effectively.

To access the entire 2017 survey report, visit <https://clearwater-analytics.com/resources/the-2017-government-and-institutional-investment-survey-report?cc=26698>

To take the 2018 Government and Institutional Investment Survey, visit <https://www.surveygizmo.com/s3/4229513/2018-Government-Survey?cc=26695>

#### About Clearwater

Clearwater Analytics® provides industry-leading web-based investment portfolio reporting and accounting services for government entities, institutional investors, corporate treasuries, insurance companies, and investment managers. For more than a decade Clearwater's daily-aggregated and reconciled solutions have delivered the highest level of portfolio transparency available on the market today for clients such as City of Newport Beach, Orange County Transportation Authority, Yahoo!, Cisco, Facebook, Oracle, and Starbucks. Clearwater reports on more than \$2.2 trillion in assets across thousands of accounts daily.



## Certified Government Investment Professional

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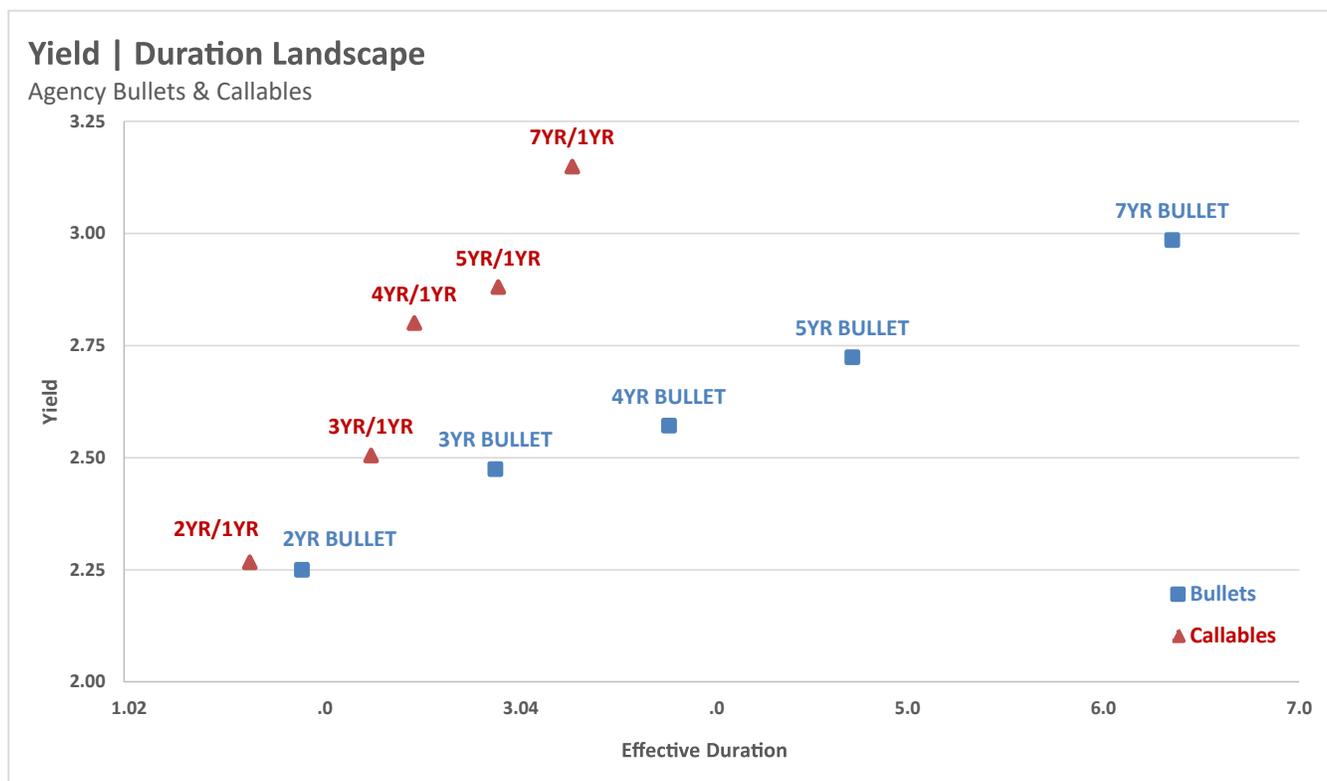


# Bond Structures for the Short-Term Economic Outlook

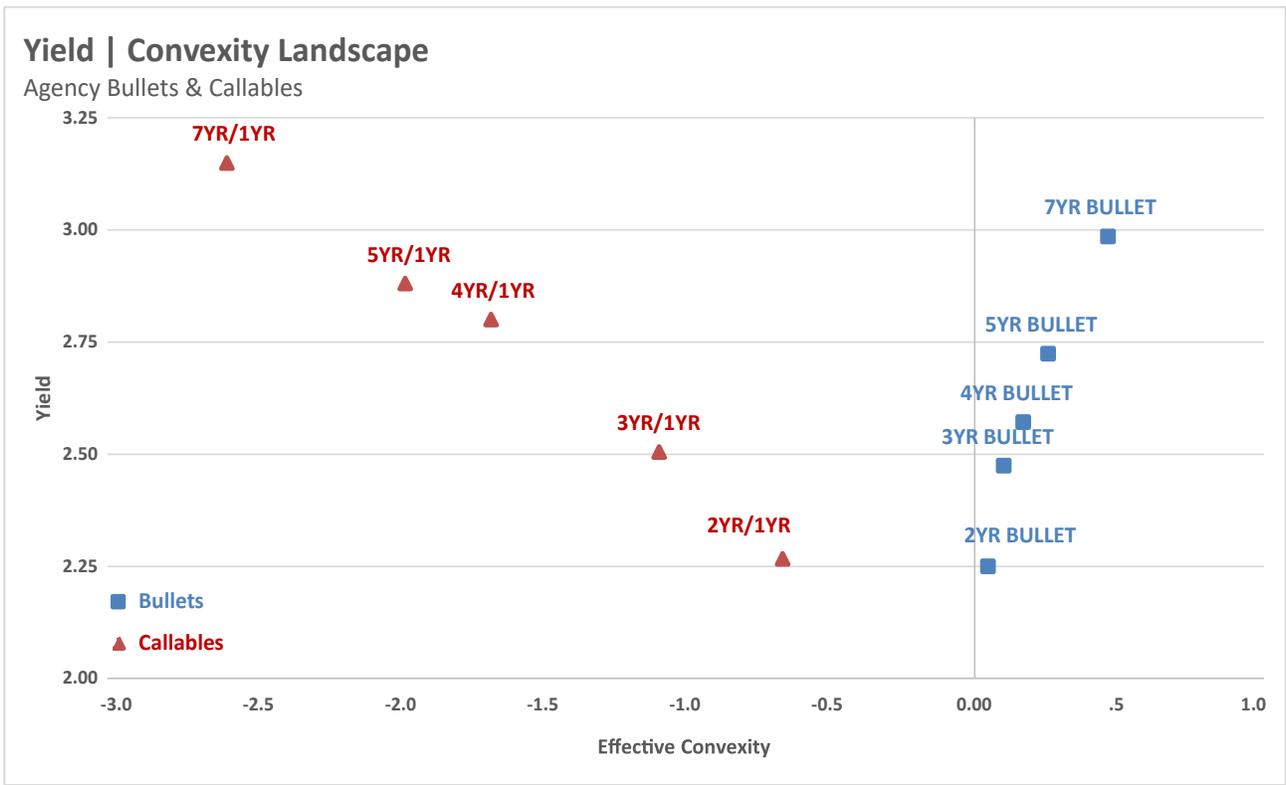
Bryant Bean, Vice President Portfolio Strategies, FTN Financial

As the end of the first quarter approaches, fixed income investors are dealing with a changing landscape within the market. With the backdrop of a growing US & Global economy, inflation expectations are increasing and the Fed is expected to continue to tighten monetary policy. Five year Treasury yields are hovering around their highest level in eight years and the ten year Treasury yield has hit its highest level since December of 2013. These higher yield levels offer a compelling opportunity for Agency investors to add attractive yields to investment portfolios, begging the question of whether callable or bullet structures are more desirable. This article will focus on the current landscape within the agency market in terms of yield and duration as well as three potential shifts in the yield curve and how they would impact total return performance (see appendix graph for details on the curve shifts). The securities analyzed focus on agency bullets and callables with maturities ranging from two to seven years, with one year of call protection in the callables.

The yield and duration landscape below highlights the intuitive nature of the risk/reward profiles of these various securities. As maturities get longer, yields incrementally increase. The agency callables have shorter duration profiles than their matched-maturity bullet counterparts due to the embedded call option. The 7yr/1yr structure appears to provide the most value relative to the other investment choices. What is driving this enhanced value?

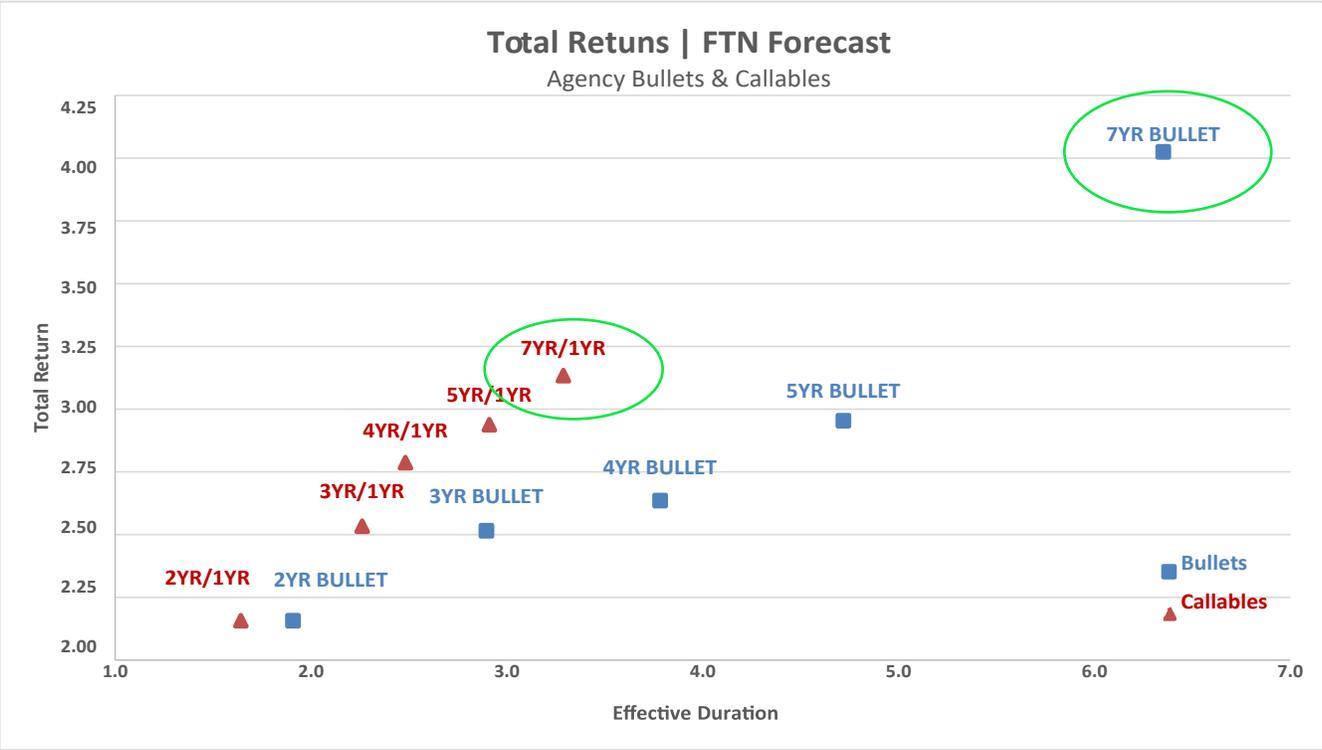


The graph below provides the clearest explanation. Similar to the yield/duration landscape above, this graph plots yield against convexity. As a reminder, whereas duration measures the change in a bond's price as rates move, convexity measures the change in duration as rates move. Clearly the 7yr/1yr has the most negative convexity of the available structures, meaning the duration is much more sensitive to changes in rates than its shorter counterparts. The upside to more negative convexity is higher yields. The question for investors is whether they would prefer more certainty (improved convexity) with lower yields, or more uncertainty (negative convexity) with higher yields.



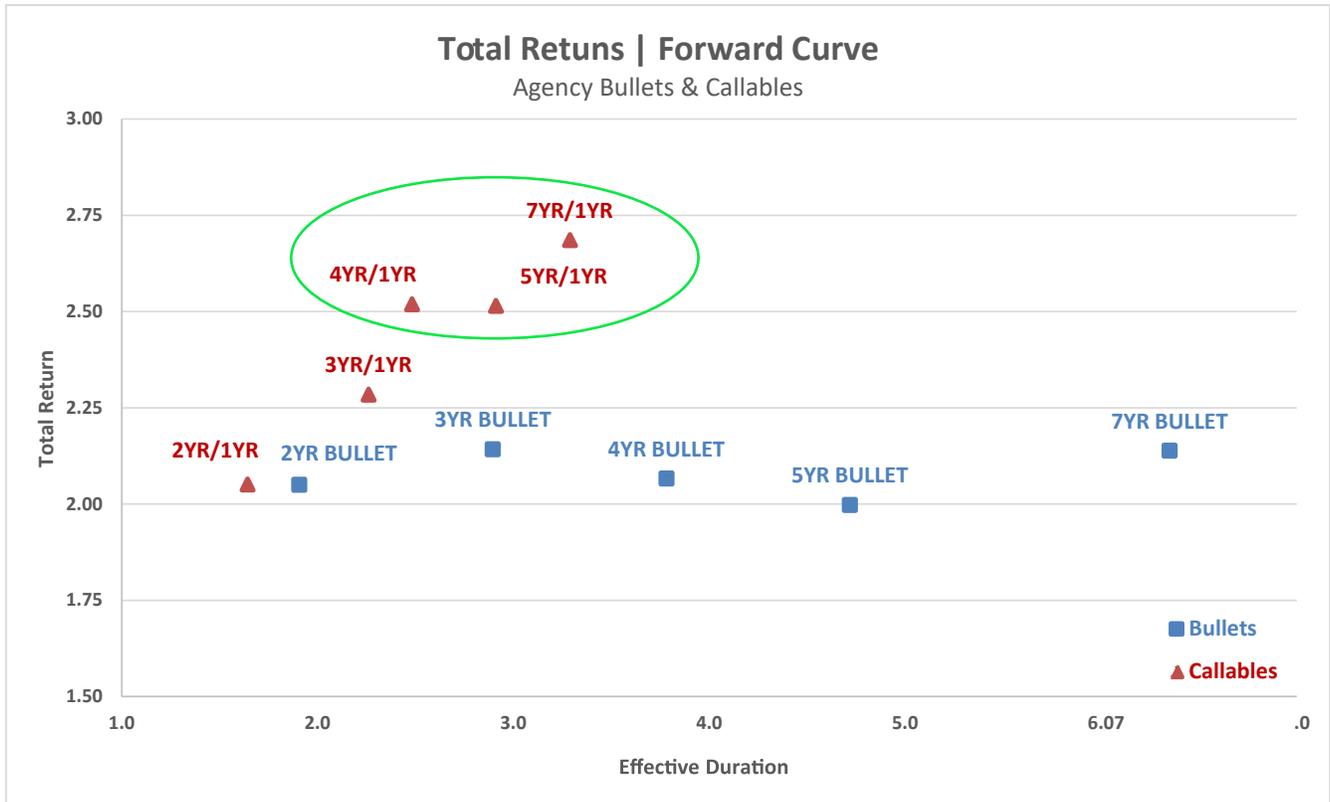
Having looked at these two “static” risk/reward profiles, we will now take the analysis a step further by looking at the total return profiles using three different rate scenarios over a twelve month horizon. This exercise will give investors further insight into how convexity impacts performance.

The first curve scenario in the analysis is based upon FTN Financial’s interest rate forecast for 2018 developed by Chief Economist Chris Low. The projection calls for rising rates on the short end of the curve in light of continued expected Fed tightening while longer rates come down from recent highs. The scatter plot below highlights the total return / duration landscape given this particular shift.



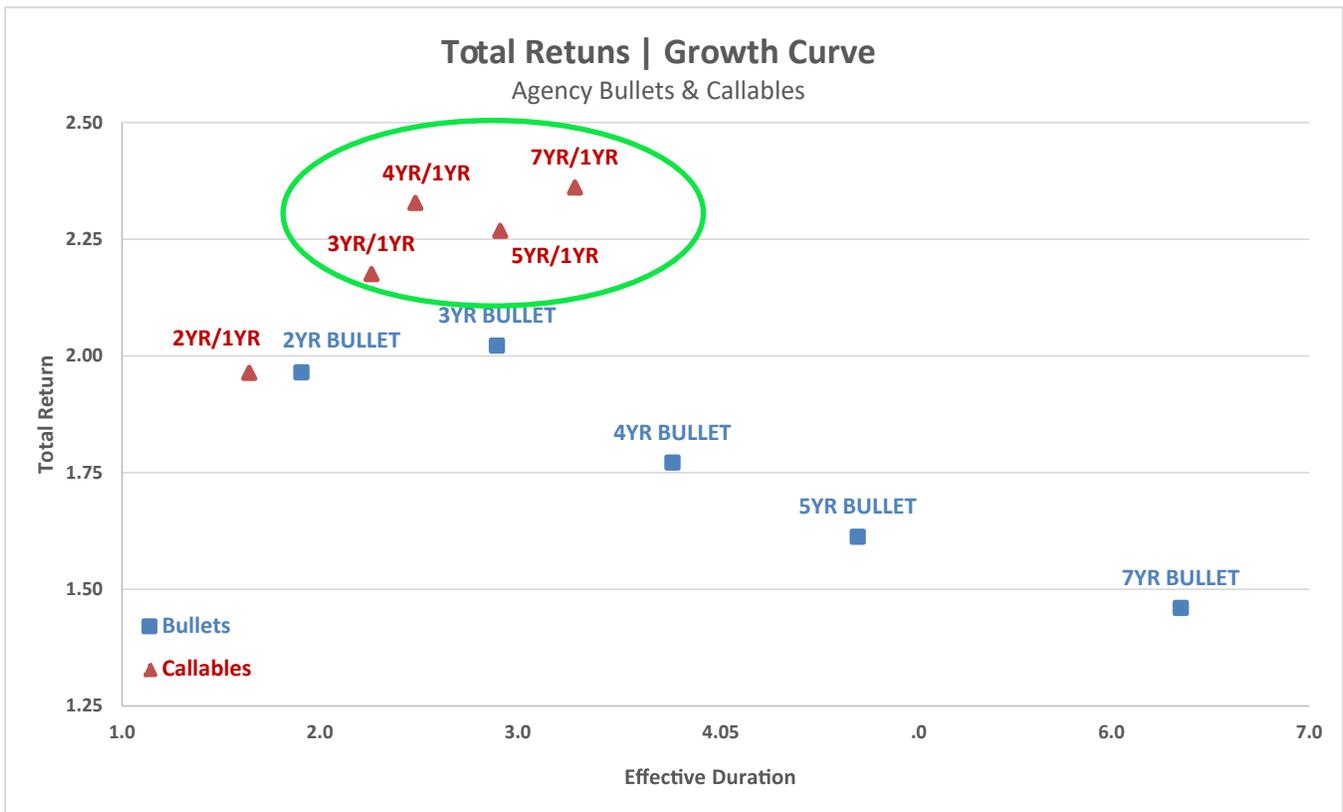
For investors targeting a duration of five years or shorter, the 7yr/1yr callable provides the most attractive return profile. With short rates rising and adversely effecting price movements in shorter duration bonds, the income (yield) component is the driving force behind the returns. However, since this forecast does have longer rates falling, the seven year bullet produces the highest available return due to improved convexity allowing the bullet to capture advantageous price appreciation, albeit with a seven year duration. For investors with policy restraints the five year bullet can also be considered.

The next rate scenario looks at implied rates at the end of 2018 based on today’s forward curve. As seen in the appendix graph, this curve scenario resembles a “Bear Flattening” of the curve, with short rates rising to a larger degree than intermediate and long rates.



Once again, the 7yr/1yr callable as well as the slightly shorter duration 5yr/1yr and 4yr/1yr structures come into focus due to higher yields driving performance in the face of rising rates on the short end. Bullets across the maturity range underperform the callables.

Lastly, total returns are run using the “Growth” scenario. This forecast assumes more of a “Bear Steepening” of the curve, with longer rates rising to a larger degree than short rates. As the name implies, this projection accounts for a faster growth phase for the US and global economy, with increasing inflation influencing longer yields higher and the Fed steadily raising short rates.



Callables again come into focus as the top performers, with the 4yr/1yr and 3yr/1yr structures offering approximately the same returns as the longer 7yr/1yr and 5yr/1yr with shorter duration profiles. Longer bullets in the four to seven year range are the clear losers as longer rates are rising at a larger pace than short rates.

In conclusion, callable agencies in the four to seven year part of the curve are consistently around the most attractive points in our return/risk landscapes, while offering a more defensive position with higher coupons and shorter durations. Although they contain more negative convexity than structures with shorter maturities, the enhanced yield profiles allow for optimum performance in the face of rising rates on the short end of the curve.

Rate Shift Appendix:

	2yr UST	5yr UST	10yr UST
<b>FTN Forecast</b>	2.40%	2.60%	2.65%
<b>Forward Curve</b>	2.56%	2.86%	3.00%
<b>Growth Curve</b>	2.65%	3.00%	3.25%

# The SBA 7a Pooling Program and Impact of Recent Changes

James Plunkett, Director of Investment Product Strategies, Vining Sparks

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## Effects on Prepays Since the SBA Pooling Changes

Five prepayment cycles have passed since the SBA announced and Colson implemented important changes to procedures for distributing cashflows from 7(a) loans to pools. These changes resulted in an upward shift in pool CPRs. Understanding 7(a) pool prepayments before and after the changes requires some knowledge of the way loans are serviced, as changes in the way cashflows are directed affect prepayments.

## What Did the SBA Do?

Two changes to the 7(a) pooling program occurred in October 2017. One establishes new guidelines for pooling by narrowing the variability of loan terms within a pool. Narrower variations will result in closer alignment between prepayment speeds of pools and underlying loans. The other change adjusted the timing of some cashflow distributions to investors for all SBA pools issued after 2004. While neither change impacts the credit quality of pools nor the fully guaranteed nature of their principal and interest, they do impact yields and market values of 7(a) pools.

## Why Did Pool CPRs Accelerate?

To understand why pool CPRs moved due to changes in the timing of cashflows, a little background on the payment mechanism is useful. Most asset-backed securities utilize cashflows from a pool of collateral for bond redemptions. Some disperse cashflows as they are received, usually minus a small servicing spread with a short delay. Other ABS disperse principal payments in a way unrelated or barely related to the underlying collateral. Credit card ABS are an excellent example of this type of structure. While SBA 7(a) pools belong much closer to residential MBS than to credit card ABS along this payment distribution spectrum, significant differences between collateral and pool cashflows greatly exceed their residential-MBS-kin.

## Amortization Differences

SBA pool maturities and coupons determine the scheduled monthly payments to be paid to investors. Because the underlying loans have higher coupons and, in most cases, shorter maturities than the pool, their principal payment schedules differ. Greater differences in terms produce greater differences in scheduled monthly principal payments. To the extent that scheduled loan principal exceeds pool principal, the difference between the two accumulate in the pool.

Since SBA pools amortize to the maturity date, the shorter amortization schedules of the collateral relative to the pool tend to result in an accumulation of undistributed excess. For many pools, this difference also suppressed CPRs, as these are measured at the pool level. These term differences and the resultant amortization schedule differences caused a large accumulation of undistributed excess in many pools.

New pool amortization differences between pools and collateral will be much smaller than in the past, thanks to new pooling guidelines introduced in October. Under these guidelines, the difference in term between the longest and shortest loan in any pool cannot exceed 6% at the origination date. This greatly limits amortization differences as compared to previous guidelines of 20% or 24%, depending on the type of pool.

## Partial Prepayments

Prepayments of over 20% of the remaining balance of any loan in a SBA pool flow through to pool investors the following month and will be measured in that month's CPR. However, smaller partial prepayments, 20% or less, are retained in the pool as undistributed excess to be distributed when a loan pays off, per the new guidelines implemented in October. Previously, partial prepayments remained in the pool until the payoff of the last remaining loan. This is another reason why pool paydowns – and CPRs – now much more closely resemble collateral paydowns than pool CPRs prior to October.

## What About Existing Undistributed Excess?

Beginning in October, payout of principal, including undistributed excess, occurs at a faster pace than previously relative to the prepayments of the remaining loans in a pool. While undistributed excess leverages the impact of each dollar of prepayment within a pool on the CPR, it does not cause that pool to prepay faster than other pools of like collateral. Because the undistributed excess behaves like the loans in terms of prepayments, prepayment speeds of pools with large amounts of undistributed excess should, on average, be the same as those of pools with less undistributed excess, provided the loans in each pool are similar. However, because they tend to have fewer loans than other similarly-sized pools, pools with large amounts of undistributed excess will exhibit wider variations in speeds from month to month.

Prior to the change CPRs for pools were, in many cases, slower than the underlying loans. The SBA's change of policy brought pool CPRs into closer alignment with the underlying loans' CPRs by removing much of the buffering effect of the undistributed excess.

## What Does This Mean?

The relative consistency of CPRs for the last five months confirms recent SBA pool prepayment trends represent the new norms for pool CPRs, based on the current economic climate. While it is appropriate to adjust for any expected changes inflicted by evolving macroeconomic conditions, the CPRs represent the way pools behave now and that is reasonable to expect going forward.

CPRs for pools issued before and after September should follow the same overall paths. Narrower WAM and WAC ranges for post-September pools should result in a slower accumulation of undistributed excess and in pool pay-downs that more closely resemble the underlying collateral. However, prepayment speed assumptions and vectors based on the last five month's history should be appropriate for the entire market, both old and new pools. This includes pools with large amounts of undistributed excess; these should post similar CPRs over time as compared to pools with lesser amounts, as the loans determine the CPR for the pool, with their prepayment rate applied to any undistributed excess.

## Conclusion

The shorter cashflows and average lives resulting from faster post-September prepayments affect yields and, therefore, prices. They do not change the desirability of SBA pools. Properly priced, these assets are just as desirable as ever. Creditworthiness, rate reset mechanisms, and all characteristics other than prepayment expectations remain just as they were before October.

Equipment Loan Pools by Vintage	Indicative Data		Prepayment Speeds (One-Month CPR)		Real-Estate Loan Pools by Vintage	Indicative Data		Prepayment Speeds (One-Month CPR)	
	Curr Bal (MM)	# of Pools	Feb 2018	Smo MAvg		Curr Bal (MM)	# of Pools	Feb 2018	Smo MAvg
All Equipment Loan Pools <sup>1</sup>	9,713	1,024	15.65%	15.33%	All Real-Estate Pools <sup>2</sup>	21,235	2,767	15.34%	15.51%
2017	3,163	113	4.84%	4.50%	2017	4,414	132	3.04%	3.15%
2016	2,301	100	10.77%	10.12%	2016	3,946	150	9.38%	8.81%
2015	1,530	124	20.45%	16.74%	2015	2,710	129	20.52%	18.38%
2014	937	109	19.57%	17.73%	2014	2,119	118	19.90%	24.38%
2013	489	81	23.13%	19.60%	2013	1,530	101	23.27%	20.10%
2012	387	85	28.50%	25.00%	2012	1,208	110	20.20%	23.44%
2011	296	81	24.19%	22.20%	2011	1,080	123	28.08%	25.50%
2010	204	97	22.09%	29.16%	2010	718	111	26.22%	20.26%
2009	96	88	41.37%	32.95%	2009	590	104	21.68%	19.86%
2008	72	93	54.50%	53.85%	2008	391	93	12.92%	17.95%
2007	34	39	31.30%	55.81%	2007	601	107	12.60%	12.16%
2006	4	13	39.90%	57.08%	2006	573	160	18.78%	17.21%
2005	0.02	1	0.00%	51.53%	2005	438	166	11.08%	12.38%