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## Short-Term Fixed Income

- **BlackRock and Western Asset Management became the latest large MMF complexes to announce changes to their respective product lineups**
- **In terms of AuM, the six large MMF fund families that have made MMF reform related announcements represent about 50% of the total MMF industry**
- **It is unclear as to whether there is a sufficient amount of assets to meet the demand for certain types of fund structures contemplated by some of these complexes**
- **With the disappointing March payrolls report, we move our forecast for a first Fed hike from June to September...**
- **...Furthermore, we have tempered our expectations for the pace of hikes. Currently, we anticipate IOER to reach 75bp and 200bp at year-end '15 and '16, respectively**
- **Although the Fed minutes did not reveal much new information, they did include a lengthy discussion of how the committee may use its various policy tools for normalization**
- **Assuming a September lift-off and an end to SOMA reinvestments starting June '16, with a \$750bn draining program we estimate that the current gap between FF and IOER can be closed by the end of 2018**

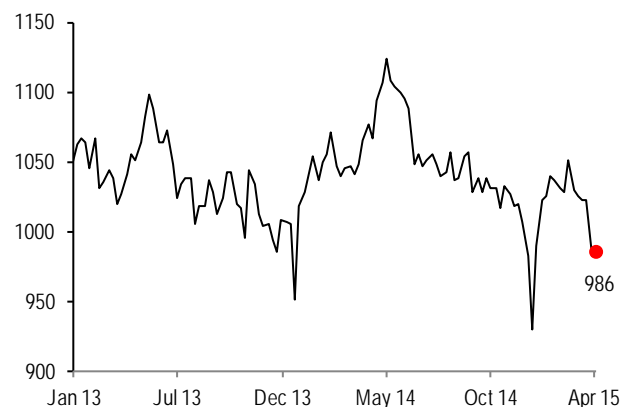
### Market commentary

Activity in the money markets was sluggish this week as both volumes and rates were slow to normalize from quarter-end technicals. In the USCP markets, total volumes averaged ~\$72bn on the week versus a weekly average of \$78bn in March. Considering the large amount of maturities that took place this week (\$187bn in CP and \$101bn in term RRP), this week's volumes were somewhat on the lighter side. All told, USCP outstandings dropped to \$985bn, the lowest level we've seen over the past two years, excluding year-ends (Exhibit 1).

In rates, GCF repo yields were also slow to retreat. After reaching a peak of 45bp on 3/31, GCF repo gradually

**Exhibit 1: Excluding year-ends, USCP outstandings are currently at their lowest level over the past two years**

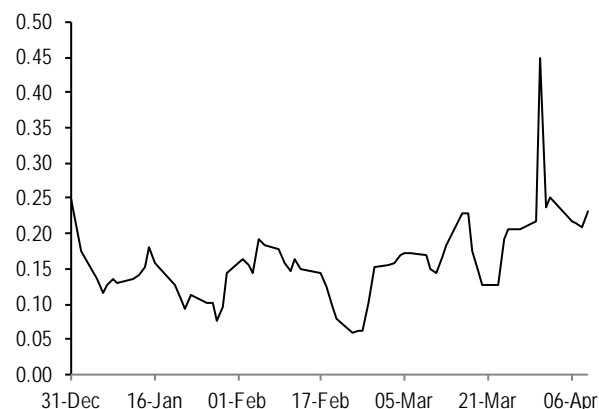
Total USCP Outstandings (\$bn)



Source: Federal Reserve

**Exhibit 2: GCF repo yields were slow to retreat post quarter-end**

DTCC GCF Treasury Repo Index (%)



Source: DTCC, Bloomberg

softened but remained elevated, trading in a range of 20-25bp (Exhibit 2). Prior to this, the range was closer to 15-20bp. We suspect increased dealer positions following the weak March jobs report likely contributed to this, as dealers financed Treasuries to cover their shorts. Regardless, we expect repo levels to richen in the coming weeks as Treasury reduces its bill issuance around the end of the tax season. Notably, the release of the Fed meeting minutes on normalization tools has had limited impact on the repo markets. In general, it appears that the Fed is still undecided on how best to use its normalization tools to raise and control short-term interest rates. We discuss this further below.

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**Exhibit 3: Six large MMF complexes which account for almost half of the MMF industry have made formal announcements to address their strategies for dealing with MMF reform**

Summary of MMF reform related announcements made by large fund complexes

Complex	AuM* (\$bn)	Prime (\$bn)		Govt (\$bn)		Municipal (\$bn)		Date of Announcement	Summary of announcement
		Inst	Ret	Inst	Ret	Inst	Ret		
Fidelity	406	135	117	58	24	5	67	1/30/2015	- No plans to institute liquidity gates and fees for its government MMFs - Will convert three of its retail prime funds into government fund status
Federated	199	63	16	74	29	12	6	2/19/2015	- No plans to institute liquidity gates and fees for its government MMFs - Intends to restructure a portion of its institutional prime and muni MMFs into 60-day max maturity funds
JPMorgan	252	116	15	86	9	19	7	2/20/2015	- No plans to institute liquidity gates and fees for its government MMFs - No intentions to institute floating NAVs in its prime MMFs and fees and gates in its non-government MMFs before 2H2016
Dreyfus	166	71	1	87	1	5	1	3/12/2015	- Working out strategy for providing daily liquidity for floating NAV funds - Currently reviewing the efficacy of 60-day max maturity funds - Possibly supplementing current offerings with unregistered cash management alternatives
BlackRock	211	137	11	51	3	4	5	4/6/2015	- No plans to institute liquidity gates and fees for its government MMFs - Intends to offer intraday liquidity through at least three NAV calculations throughout the day for institutional prime MMFs - Intends to restructure a portion of its institutional prime and muni MMFs into 7-day max maturity funds - Will convert certain retail prime funds into government status
Legg Mason	45	14	1	26	2	1	1	4/7/2015	- No plans to institute liquidity gates and fees for its government MMFs - Will offer two non-money market short duration bond funds that will not be subject to liquidity fees and redemption gates (but will transact at a floating NAV)
<b>Total Announced</b>	<b>1279</b>	<b>536</b>	<b>162</b>	<b>382</b>	<b>67</b>	<b>46</b>	<b>87</b>		
<b>Total Announced as % of Mkt</b>	<b>49%</b>	<b>56%</b>	<b>34%</b>	<b>52%</b>	<b>36%</b>	<b>61%</b>	<b>47%</b>		

Source: iMoneyNet, J.P. Morgan  
 \*AuM as of April 7, 2015

Separately, two more major money market fund (MMF) complexes, BlackRock and Western Asset Management, announced changes to their MMF product lineup this past week. Similar to Fidelity and Federated, BlackRock's approach to 2a-7 reforms involved converting some of its prime retail funds into government funds as well as establishing a institutional prime MMF that is limited to a maximum of 7-days (Exhibit 3). In the case of Western Asset Management, they have decided to launch two non-money market short duration bond funds to its product offerings. While these funds will transact at a floating NAV and be subject to market fluctuations, unlike institutional prime funds they are not subject to liquidity fees and gates. Both fund families will also continue to offer existing products according the new SEC 2a-7 guidelines.

To date, six large MMF complexes have made some form of announcement as it relates to MMF reform. In terms of assets, those fund families represent about 50% of the MMF market. At a high level, it's clear that each MMF complex's approach to MMF reform is different. There is no longer "the one size fits all solution" for liquidity

shareholders. MMFs are developing solutions that are specific to their client base. To that end, those solutions may be smaller in scale and appeal to a niche segment of the market.

However, the challenge in offering such tailored products is that they also need to be met with a specific type of supply, whether that is in the form of money market instruments that mature in less than 7 or 60 days, bills, repo, and other types of money market government securities. In the face of banks trying to reduce their reliance on short-term wholesale funding due to capital/leverage constraints and to push out their short-term borrowings for liquidity purposes as well as other non-MMF investors (e.g., hedge funds, states and local governments, corporations, etc.) competing for similar products, it's unclear whether there are sufficient assets to meet the demand required of certain types of MMFs.

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To be sure, GE's announcement that it is planning to sell most of its GE Capital assets does not help the supply/demand imbalance in the money markets <sup>1</sup>.

Currently, GECC has one of the largest US CP programs in the market. With \$22bn outstandings, they are one of 10 largest CP issuers. A look at GECC's historical CP balances shows that the company has already shrunk its program by 67% (\$45bn) from its peak in 2007 (Exhibit 4). With today's announcement, the company anticipates reducing its unsecured CP balances to ~\$5bn by the end of 2015. This implies that \$17bn of GECC CP will be removed from the market. For context, that represents about 2% of the total USCP market.

## FOMC minutes and outlook

Following the disappointing March employment report, our economists pushed back their expectation for a rate hike to September from June. Although the March non-farm payrolls was the trigger for the change, generally disappointing performance of economic data versus expectations over most of the first quarter was the real driver. This weak data, the lower rate projections in the March SEP and commentary from Yellen and other Fed officials also leads us to temper our expectations for the pace of hikes once liftoff arrives. Currently, we anticipate IOER to reach 75bp and 200bp at year-end '15 and '16, respectively.

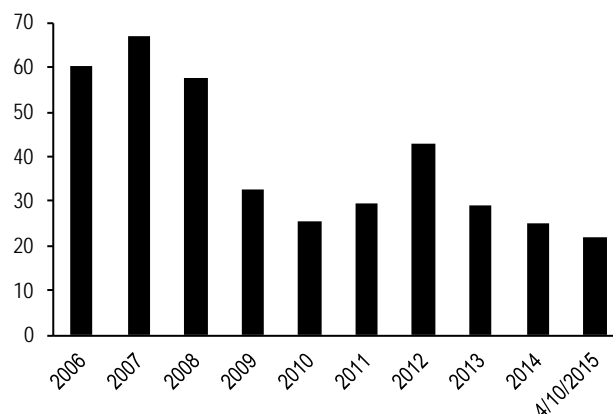
The minutes to the March 18 FOMC meeting didn't provide a whole lot of new information about the Committee's policy leanings (M. Feroli, "Fed keeps its cards hidden in March minutes", April 8th, 2015). The minutes reported that "several" favored a rate hike at the June meeting, but we note that (a) this refers to "participants," including non-voters, who tend to skew a little more hawkish than the more influential voting members of the Committee, and (b) this was obviously before the March payrolls disappointment. Instead, the thrust of that passage seemed pretty consistent with the dots: a number favoring a Q2 liftoff, but many also favoring Q3 and only two who viewed later than 2015 as appropriate for a first move. On net, the minutes are consistent with our September liftoff call.

The minutes also included a lengthy discussion of how the Committee might eventually use various policy tools to facilitate higher short term rates by draining reserves. At

<sup>1</sup> <http://www.genewsroom.com/press-releases/ge-create-simpler-more-valuable-industrial-company-selling-most-ge-capital-assets>

## Exhibit 4: GECC has already shrunk its unsecured CP program by 67% since its peak in 2007

GECC Unsecured US CP balances (\$bn)



Source: 10-K, Bloomberg, J.P. Morgan

the end of the discussion, the participants chose to augment the Committee's Policy Normalization Principles and Plans with three statements. The Committee:

- Acknowledged the target range for Fed funds would remain 25bp wide;
- Set IOER at the top of the range and confirmed the ON RRP offer rate would be at the bottom; and
- That it would adjust the parameters of IOER, ON RRP and other tools "as necessary for appropriate monetary control," further noting that the Committee expects it will be appropriate to reduce the capacity of the RRP "fairly soon" after it commences policy firming.

Additionally, the Committee approved a resolution extending the use of up to \$300bn term RRP programs over the next 3 quarter-ends.

We read the discussion of normalization tactics as reflecting ongoing division on the Committee about the use of ON RRP. Although none of the meeting participants appear to be advocating for ON RRP as a permanent tool, there is a range of thought about how temporary the ON RRP might be, and on how large it might temporarily be allowed to grow. Some participants see it as a useful tool for raising money market yields. But, others clearly worry that providing a close substitute for deposits it could destabilize one or more banks under stressed conditions. While this divided view of the program is hardly news, the discussion regarding strategies

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for reducing ON RRP usage is enlightening both because of what is discussed and what is not.

The RRP discussion starts by considering whether to increase the size of the ON RRP at liftoff by temporarily raising or removing the program cap to facilitate higher non-bank interest rates. Missing from this discussion is any notion of narrowing of the gap between ON RRP and IOER at liftoff to raise money market rates. However, there is mention of possibly widening the gap between the two rates as a possible way to put the ON RRP on a diet once normalization begins. The minutes don't indicate a firm conclusion was reached on prospectively raising the program cap at liftoff or widening the IOER/ON RRP gap post-liftoff.

However, we wonder what Committee members think the practical effects would be of widening the rate gap. We have suggested in our previous notes that the demand for short-term government securities is likely to surge as much as \$900bn over the next 6-18 months, driven by money market fund reform and regulatory driven deposit shedding by large US banks<sup>2</sup>. Holding the supply of government securities constant, a surge in demand for government securities will likely result in increased demand for RRP at liftoff and beyond. This elevated demand is likely to continue well into the period of policy normalization until some combination of increased supply of, or reduced demand for, short term government debt develops. In this context, not increasing the size of the RRP or widening the gap between IOER and ON RRP will drive a wedge between Fed funds and short term treasury yields, since bill yields are likely to remain well below RRP levels. But perhaps there is an unspoken policy intention is to starve cash out of the money markets and encourage its migration into bank deposits or other parts of the capital markets. If this is the case, limiting the scale of the RRP or widening the IOER/ON RRP gap would seem to make sense.

The Committee also discussed other options for reducing the size of the ON RRP "fairly soon" after normalization begins. These options included:

- **Term RRP.** Although there was agreement among meeting participants that term RRP reduces demand for ON RRP, some argued that it did not reduce the Fed's "presence in the money markets". It's true enough that ON and term RRP are close substitutes, but we wonder at the issue

<sup>2</sup> A. Roever "Deposit non grate: Bank regulations, deposits, and monetary policy", February 27th, 2015

### Exhibit 5: Selling short term Treasury holdings from the SOMA portfolio would only provide a limited boost to supply over the next 2 years

Projected 12m forward-looking UST maturities from SOMA portfolio (\$bn)



Source: Federal Reserve, J.P. Morgan

of the Fed's ongoing intervention in the money markets. Do some Committee members view disengaging from money markets as a policy goal unto itself? If so, should we expect a wider gap between Fed funds and non-bank rates post lift off?

- **Asset sales.** One of the first headlines to pop-up when the minutes were released was that the Fed was considering asset sales, which led to a quick but temporary rise in intraday yields. The actual discussion in the minutes is mundane. Some meeting participants saw selling assets as a possible solution to a bloated RRP program "at some stage". We would consider this as pretty far down the Fed's list of things to try, as several participants seemed concerned about the impact sales might have on longer term interest rates. As a practical consideration, selling short term Treasury holdings (maturity <1y) from the SOMA portfolio might not provide much relief to the RRP for a few years yet (Exhibit 5). Recall that in Operation Twist the Fed exchanged its short maturity treasuries for longer maturities.

In the end, the long discussion of normalization tools at the March FOMC meeting leaves market participants with many more questions than answers. The discussion is mostly war gaming for potential future events, but there are practical considerations for anybody trying to price financial instruments tied to Fed funds, such as Fed funds futures or OIS. The same is true for anybody trying to figure out where short term treasury or repo rates will be in

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the future...and not that far into the future. Maybe a June liftoff is now unlikely, but September or December or even Kocherlakota's 2H16 are not that far off.

While it is useful to know the Fed is committed to a 25bp corridor for Fed funds, the difference between the top, middle or bottom of the corridor represents real money to market participants. It would be helpful to have more clarity on where fed effective might trade relative to the range. To further this, we have updated our sensitivity analysis for the FF/IOER basis given various reserve draining scenarios (combinations of RRP and TDF) combined with our expectations of maturities in the SOMA portfolio (Exhibit 6). Assuming a September '15 lift-off and an end to SOMA reinvestments starting June '16, with a \$750bn draining program we estimate that the current gap between Fed funds and IOER can be closed by the end of 2018. However, if the scale of ON RRP is curtailed post liftoff closing the gap will require greater reliance on alternative draining methods such as the TDF.

Given the Fed's mixed messaging on reserve draining, we don't believe the market is pricing in a convergence of FF and IOER. As we get closer to liftoff, and the Fed firms up its reserve draining plans it is possible the OIS market might price in some closure. Indeed, our derivatives strategists favor certain forward starting FF/Libor basis tightening trades (See *Interest Rate Derivatives*). However, continued ambiguity about the role of RRP may continue to feed anxiety about low government money market rates persisting even after liftoff.

## Coming attractions

- JPM and WFC will be the first two large US banks to report Q1 earnings on 4/14. BAC will report on 4/15, followed by C and GS on 4/16, MS on 4/20, BK on 4/22 and STT on 4/24. Our large cap bank strategists expect Q1 results to be mixed with some pockets of strength in investment banking. Furthermore, they expect trading revenues to be up with strong FICC and equity volumes, coupled with declines in NIIs and NIMs (See V. Juneja et. Al "*Large Cap Banks: 1Q Preview: Strong Markets Position IBs Better Than Regionals, Consumers Remain Cautious*", April 1, 2015).
- The Fed will release its Beige book on 4/15.
- US CPI for March will be released on 4/17.

## Exhibit 6: As excess reserves are drained, we expect effective Fed funds to set higher in the corridor, but this is not yet priced in to the market...

Projected\* evolution of the FF/IOER spread\*\*: bp

Date	RRP / IOER	Excess balances (\$tn) based on RRP+TDF size			FF/IOER spd (bp) based on RRP+TDF size			Market ‡
		\$0.75tn	\$1tn	\$1.25tn	\$0.75tn	\$1tn	\$1.25tn	
Jun 15	20	2.3	2.3	2.3	14.6	14.6	14.6	14.4
Dec 15	25	2.1	2.1	2.1	17.0	17.0	17.0	17.4
Jun 16	25	1.8	1.8	1.8	15.3	14.7	14.7	20.2
Dec 16	25	1.5	1.3	1.3	12.5	11.1	11.1	22.2
Jun 17	25	1.1	0.9	0.9	9.6	8.0	7.5	23.3
Dec 17	25	0.8	0.6	0.4	7.0	5.2	3.7	24.0
Jun 18	25	0.4	0.2	0.0	3.7	1.7	0.0	24.5
Dec 18	25	0.0	0.0	0.0	0.3	0.0	0.0	24.6

\* Projections based on regression of FF/IOER bias on excess reserve balances<sup>†</sup> and change in net supply at the front end. We also assume that the FF/IOER bias is floored at -1, and capped at 0. From \$0.5tn in excess reserves, we assume the FF/IOER bias goes from -0.18 to 0 as excess balances converge to zero.

\*\* FF/IOER spread = FF/IOER bias x rate corridor.

<sup>†</sup> To project excess reserves, we assume steady state Treasury balances at the Fed will eventually be \$500bn, and that deposits with Federal Reserve banks, other than reserve balances (term deposits, etc.) and other repo (foreign official and international accounts) remain unchanged, and that currency in circulation increases at an annual rate of about 7% (close to the historical norm). Required reserves are assumed to be in the \$50bn-\$100bn range, and the terminal size of the Fed's balance sheet is assumed to be \$3tn. In this analysis, we assume a first hike at the September FOMC meeting, and update the mortgage payoff forecast for the current forward curve and vol surface, as well as assuming MBS reinvestments are halted in June 2016.

‡ Forward starting 1-month FF/Libor basis swap levels as of 4/10/15.

- First quarter GDP will results will be released on 4/29. We forecast growth of 0.6% for the quarter.
- The FOMC will conduct its April meeting from 4/28 to 4/29.

## Trading Themes

We expect short-term rates to drift upwards in 2015 in response to the beginning of a Fed tightening cycle. However, the details of how monetary policy is implemented and impact of regulations will have different effects on the various short term interest rates.

Additionally, given the immense demand for short-term product and the lack of investible supply, we do not foresee spreads on money market instruments widening significantly this year, and hence do not expect high returns to be found in the money market space in general. With the prospect of rising front-end rates, we believe that floating rate instruments will perhaps offer the best relative value as the year progresses.

### Overweight Treasury coupons versus bills

In spite of the immense demand for high-quality liquid assets, Treasury coupons continue to trade cheap to bills. Although the current spread is only 1-3bp, it's possible that this spread could widen as a large amount



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of Treasury coupons are expected to roll into the 2a-7 space. In the coming year, we expect 2a-7 Treasury coupon balances to increase by \$191bn while bills to increase a moderate \$17bn.

- **Overweight collateralized CP versus bank unsecured CP and ABCP**

Collateralized CP programs are structured such that CP notes issued are guaranteed by the sponsoring bank. This asset class is an attractive way to gain direct bank exposure than they would otherwise via CP/CDs and ABCP while picking up 2-7bp in yield.

- **For Moody's matrix considerations, overweight partially supported ABCP programs with long-term sponsor ratings below Aa3. Conversely, overweight fully supported ABCP with long-term sponsor ratings above Aa3 versus partially supported programs.**

Under the Moody's matrix MMF rating methodology, funds are rated on the basis of the tenor and credit rating assigned their portfolio's underlying assets. In the case of ABCP, partially supported programs by default receive a Moody's LT rating of Aa3, whereas fully supported programs receive the LT rating of the program's sponsor.

- **Overweight front-end floating versus fixed rate instruments**

We believe that floating rate instruments offer better relative value over their fixed rate counterparts as Libor and other short-term rates begin to drift upwards in response to MMF reform-related flows and a Fed tightening in 2015.

- **Overweight Financial bonds vs. Non-Financials**

We expect bank spreads to outperform non-Bank in 2015 as rising rates is a positive for bank earnings. Also, banks are not at risk for M&A and higher leverage, they are actually de-leveraging to meet capital requirements. We believe these factors will more than offset the increased bank bond supply that will be issued in the next few years to meet Total Loss Absorbing Capital (TLAC rules). (See *High Grade Outlook*)

- **Initiate outright short duration positions in the front end as we approach the onset of the first rate hike**

Front-end yields are expected to rise considerably as

we approach the timing of the first rate hike. Given the punitive cost of holding short duration trades, we suggest investors be tactical in positioning for higher yields, and recommend initiating short duration positions in the front end 2-3 months before the first hike. (See *Treasuries Outlook*)

- **Overweight 1-3y AAA credit card ABS versus agencies**

Both asset classes are rated AAA, but ABS trade much wider than agencies do. Currently, AAA-rated 2y credit card ABS is offered at the equivalent of swaps +25bp versus 2y agency at swaps -15bp. Furthermore, our Agency strategists note that losses on credit card ABS master trusts are at record lows, while credit support levels are at record highs. The credit card ABS sector is fundamentally cheap and least vulnerable to technical volatility. Consequently, ABS should provide a safe haven to investors looking for relatively higher-yielding cash surrogates. (See *ABS Outlook*)

- **Consider senior tranches from off-the-run subprime auto ABS issuers for spread pick-up**

Senior tranches from off-the-run subprime auto ABS issuers offer spreads of up to 100bp for very short (<2y WAL) bonds that are highly rated (from AAA down to A). That is a significant concession versus comparable short high investment grade credits. Additionally, our Agency strategists believe these senior bonds are very well protected structurally and investors are being very well compensated for the illiquidity and credit risk. (See *ABS Outlook*)

- **Stay long 6-month bills to position for lower repo rates and a decline in Treasury bill supply**

– Stay long 100% risk, or \$500mn notional of T 9/24/15 (*Treasuries*, 3/27/15). P/L since inception: +3.3bp of yield.

- **Front-end steepeners are likely to perform well over a range of probabilities across spanning interest rate scenarios, as are intermediate belly-cheapening flies**

Our framework for identifying trades that are “convex” over a range of probability distributions on Fed rate hike scenarios suggest that front-end steepeners (2s/5s, 3s/5s, White/ Blues, Reds/Greens, and Reds/Blues) and intermediate belly-cheapening flies (2s/5s/10s, 3s/7s/10s) are likely to do well early next year. (See *Interest Rate Derivatives Outlook*)

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- **Look for wider swap spreads across the curve; front and intermediate spreads are likely to lead the widening**

Spreads across the curve appear tight; front-end spreads should widen as a result of lower front-end Treasury supply and regulatory demand. Intermediate spreads should widen on the back of increasing yields and a widening mortgage basis. Long-end spreads will likely widen given our forecasts for reduction in hedging needs from VA accounts and a flattening yield curve. (See *Interest Rate Derivatives Outlook*)

- **Buy Libor basis wideners and FF/Libor tighteners; be aware of the impact of new reserve draining initiatives and regulations**

A range of reforms like NSFR and MMF rules are likely to result in wider Libor bases over the course of next year. While many reforms and Fed initiatives point to tightening of the FF/Libor basis, the Fed is still tinkering with various reserve-draining mechanisms—the efforts bear watching as they could have a big impact on this basis. (See *Interest Rate Derivatives Outlook*)

- **Initiate 1Yx1Y FF/Libor basis narrowers**

We expect reserve draining to push effective Fed funds higher in the IOER/RRP corridor, which is not priced into the term structure of FF/Libor basis swaps. Position for narrower FF/Libor spreads 1-year forward (See *Interest Rate Derivatives*).

– Pay Libor in \$1bn notional of a 1Yx1Y Fed Funds/Libor basis swap @ 20.5bp. Carry and slide on this trade is 1.4bp over 3 months.

- **Maintain EDM5/Z5 steepeners**

– Stay long 1000 EDM5 contracts versus staying short 1000 EDZ5 contracts (*Interest Rate Derivatives*, 12/19/14). P/L since inception: loss of 17.7bp of yield.

- **Maintain synthetic 2Yx1Y forward Treasury/OIS narrowers**

– Stay \$1bn notional of 1% Mar 2018s, sell \$1bn notional of 0.5% Mar 2017s and continue to pay fixed in \$982mn notional of a 3/31/2017x3/15/2018 OIS swap (*Interest Rate Derivatives*, 3/27/15). P/L since inception: loss of 0.3bp of yield.

- **Over the next quarter, overweight short-lockout,**

- **short-maturity callables versus duration-matched bullets to enhance yield**

Short-dated callables offer the highest call probability and largest rate and rate volatility breakevens. However, a sell-off in front-end yields ahead of the Fed hike and pickup in volatility in the front end of the curve could lead to underperformance beyond 1Q15. (See *Agencies Outlook*)

- **Remain neutral on European SSAs versus Agencies**

USD-denominated EIB/KfW issues have outperformed US Agencies on asset swap over the last month. However, this outperformance is unlikely to reverse given ECB QE and the eventual Fed rate hike. Given competing factors, we turn neutral on USD-denominated EIB/KfW debt versus US Agencies on asset swap.

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