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Short-Term Fixed Income

- **Tax day caused light volumes in the money markets this week, as most investors remained on the sidelines through the 15th**
- **Taxable money market funds experienced \$31bn of outflows during the week leading up to tax day, in line with recent history**
- **Despite continuing elevated levels, we expect GC to soften in the weeks to come with an anticipated \$47bn reduction in bill supply and MBS P&I technicals coming into play**
- **Although still far away from pre-crisis highs, the securities lending business has grown over the past two years...**
- **...however, it is difficult to tell if this growth will persist, as regulatory balance sheet constraints may limit the amount of sec lending activity taken by dealers**
- **We provide an update on demand for US T-Bills. Asia has represented the majority of demand for bills year-to-date with \$13bn of net buying. Conversely, Latin America has been a net seller by \$4bn, while other countries holdings have gone mostly unchanged**
- **We expect money market funds to become larger owners of bills in 2015 and 2016, as MMF reform and deposit shedding by large banks will likely push large amounts of cash into government MMFs**

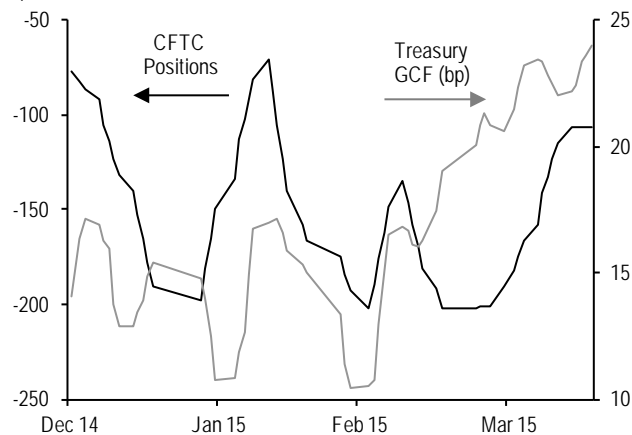
Market commentary

Tax day was the focal point in the money markets this week. Volumes were muted through Wednesday as most investors remained on the sidelines, focused on maintaining liquidity and meeting redemptions. Once tax day passed, activity returned back to relatively normal levels. From a flows perspective, things played out in line with recent history. Taxable money market funds experienced \$31bn or -1.3% in outflows in the week leading up to tax day this year, compared to -\$33bn (-1.4%) in 2014 and -\$29bn (-1.2%) during 2013.

On the rates front, 2-year and 1-year Treasury rates richened by 4bp and 2bp respectively, mostly on the back of soft economic data and dovish Fed speak. Further in on

Exhibit 1: Dealer positioning and GC levels have been reasonably correlated as of late

CFTC dealer positions Treasury futures; '000s of contracts* versus Treasury GCF repo rate



*Long contracts outstanding minus short contracts outstanding
**5 day moving average; Month-end and P&I dates removed
Source: CFTC

the curve, money market rates were range bound throughout the course of the week. Notably, Treasury GCF repo continued to trade firm, closing out at 24bp, 2bp cheaper on the week and unchanged since the beginning of April. From what we could see, Non-GCF triparty repo rates followed the same trend, slightly increasing this week and hovering around the same level during the month. Consequently, usage of the overnight Fed RRP facility was lackluster, averaging \$83bn in daily usage versus its \$111bn year-to-date average.

We suspect that the recent elevated levels in GC can be at least partially attributed to dealer short covering following the March jobs report. Indeed, dealer positioning has been moderately correlated to GC levels as over the past several months (Exhibit 1). In any case, we look for levels to soften over the coming weeks. Tax season-related bill paydowns are expected to drain an additional \$47bn in collateral before the end of April. Additionally, monthly MBS P&I technicals will begin to take effect next week. Taken together, we believe that these two factors combined are likely to depress GC by at least a few basis points.

Revisiting Securities Lenders

For better or worse, money market funds have been the subject of many people's attention recently. With \$1.4tn of assets under management, prime money market funds have the ability to influence many parts of the short-term

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markets. Other investors, like securities lenders (sec lenders), who also play a large role in the money markets, tend to get lost in the shuffle. While sec lending reinvestment portfolio balances have declined significantly since mid-2007, data from the Risk Management Association (RMA) reveal that they still have approximately \$700bn of assets under management.

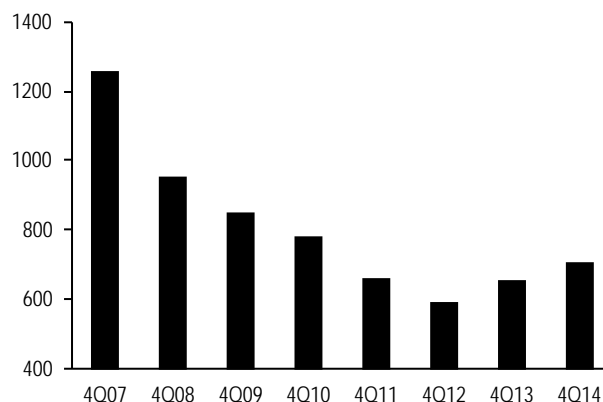
In fact, over the past two years USD balances of sec lender portfolios have grown, to the tune of \$114bn or 19% according to RMA (Exhibit 2). This scale of growth is consistent with other data sources. When we looked at the amount of global collateral held by four large sec lenders in support of sec lending indemnification agreements, over the past two years balances have increased by \$155bn (or 19%) to \$974bn as of 4Q2014 (Exhibit 3). Similarly, Fed data on primary dealer financing activity shows that sec lending activity has also grown. In particular, total securities borrowed by primary dealers increased by \$60bn over the past two years, driven primarily by an increase in equities borrowed (Exhibit 4). An increase in securities borrowed activity by dealers typically results in higher sec lender portfolio balances as securities lent are usually collateralized by cash.

That cash is then reinvested in the short-term markets. To that end, sec lenders' asset profile is very similar to prime MMFs. They invest in CP, CDs, repo and time deposits. But unlike MMFs, they are not regulated by the SEC and hence can invest in highly-rated securities outside of 2a-7 (e.g., 1-3y corporate bonds). Indeed, according to RMA, WAMs to final maturity on sec lending portfolios are 88 days long. Even so, yields on sec lenders' cash reinvestment portfolios are modest, returning only 0.22% as of 4Q2014. This is likely attributed to the fact that 56% of their portfolio are invested in repos, time deposits and MMFs (Exhibit 5). Similar to other short-term investors, sec lenders have increased their liquidity positions over the past two years, impacting returns.

Overall, sec lending balances have stabilized after falling by a significant amount in 2008. The deleveraging among market participants that took place immediately after the crisis is largely behind us, as evident by the recent boost in assets under management. That said, it's unclear whether this trend could be sustained going forward. One challenge could be regulatory related as balance sheet constraints related to capital, liquidity and leverage could limit the amount of sec lending activity taken by dealers (though so far, the regulations do not appear to have had a significant impact on activity). Another challenge could

Exhibit 2: Industry data show that sec lending balances have grown fairly sizably over the past two years...

Securities Lending Balances (\$bn)



Source: Risk Management Association

Exhibit 3: ...a trend consistent with balances reported by four large individual securities lenders

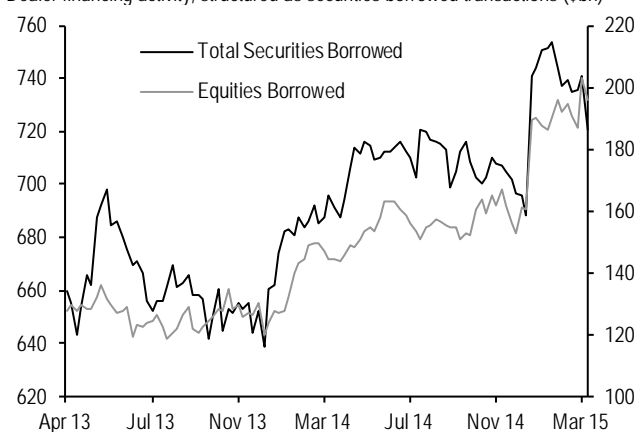
Global Securities Lending Portfolio Balances (\$bn)

	4Q12	4Q13	4Q14	2y Chg (\$bn)	2y Chg (%)
State Street	312	332	364	52	17%
Bank of NY Mellon	253	252	316	63	25%
J.P. Morgan	165	176	177	12	7%
Northern Trust	88	102	116	28	32%
Total	818	862	974	155	19%

Source: 10-Qs and 10-Ks

Exhibit 4: ...as well as Fed data on sec lending activity

Dealer financing activity, structured as securities borrowed transactions (\$bn)



Source: NY Fed Primary Dealer Financing Data

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be related to market valuations. Sec lending balances fluctuate with the market as posted collateral needs to be equal to or greater than the market value of the securities loaned. Given steady demand, balances grow as markets rally and vice versa. While our equity strategist forecasts the S&P 500 to reach 2250 by year-end, our Treasury strategists are predicting that Treasury yields will rise across the curve during the same time period.

Demand update for Treasury Bills

On Wednesday, Treasury released its monthly TIC (Treasury International Capital) data on foreign transactions in short-term US securities for February 2014. Since market participants outside the US comprise roughly 46% of the bill market, we take this opportunity to provide a demand update for Treasury bills.

Year-to-date (through the month of February), net issuance of Treasury bills increased by \$15bn. Of that amount, foreign investors absorbed \$9bn. However, demand was mixed across the type of foreign investor. Foreign official institutions, such as central banks, were net buyers of Treasury bills, boosting their holdings by \$16bn year-to-date to \$351bn (Exhibit 6). Foreign banks were more modest in their purchases, increasing bill holdings by \$3bn to \$109bn. In contrast, other non-domestic institutions such as asset managers and sovereign wealth funds decreased their bill exposure by \$10bn to \$216bn. At a region-specific level, Asia comprised the lion's share of demand for Treasury bills with \$13bn of net buying year-to-date (Exhibit 7). Latin America, on the other hand, were net sellers (down \$4bn), while other countries saw little change to their level of bill holdings.

Away from foreign investors, money market funds (MMFs) reduced their treasury bill holdings the first two months of this year. Prime MMFs decreased their exposure by \$5bn while government MMFs decreased it by \$29bn. A closer look at their portfolio holdings reveal that both prime and government MMFs reduced their aggregate exposure to all Treasury securities (bills, coupons, and FRNs combined) (Exhibit 8). For prime MMFs, this is probably consistent with the increase in US CP outstandings during time period (+106bn), as funds reallocated into higher yielding products. For government MMFs, their reduced exposure was likely driven by \$36bn of outflows year-to-date.

For all other investors, their total demand for bills increased by \$27bn. Because of the lack of available data,

Exhibit 5: About 56% of sec lending portfolios are invested in repos, time deposits and MMFs

Asset breakdown of sec lenders' USD reinvestment portfolios

Asset Mix	Q4:2012	Q4:2013	Q4:2014
Fixed Rate Instruments	20%	17%	13%
Unsecured CP	30%	37%	38%
ABCP	26%	15%	17%
Other Corporates	44%	48%	46%
Floating Rate Instruments	20%	17%	16%
ABS	36%	18%	20%
Other Corporates	53%	69%	69%
Repurchase Agreements	37%	38%	40%
US Treasury	23%	20%	18%
Agency	33%	24%	24%
Corp	18%	24%	24%
Equity	26%	31%	34%
Deposits (CD & other)	10%	14%	17%
Time Deposits	2%	4%	3%
Certificate of Deposits	7%	10%	13%
Money Market Funds	13%	13%	13%
2a-7	80%	66%	70%
Non-2a-7	20%	34%	30%
Other	0%	1%	1%
Portfolio WAM (Final Maturity): days	79	90	88
Portfolio Cash Reinvestment Return	0.36%	0.23%	0.22%

Source: NY Fed Primary Dealer Financing Data

Exhibit 6: Year-to-date, demand for Treasury bills was mixed across the type of foreign investor

Breakdown of Treasury Bill Holders

	Dec 2014		Feb 2015		YTD Chg in Balances (\$bn)
	Balance (\$bn)	% of Total	Balance (\$bn)	% of Total	
Bill Outstandings	1,458	100%	1,473	100%	15
Foreign Investors	672	46%	681	46%	9
Foreign Official Inst.	335	23%	351	24%	16
Foreign Banks	106	7%	109	7%	3
Other Foreigners	225	15%	216	15%	-10
Int'l & Reg Org.	5	0%	5	0%	0
Money Funds	242	17%	208	14%	-34
Prime MMF	33	2%	29	2%	-5
Govt MMF	208	14%	179	12%	-29
Primary Dealers	4	0%	17	1%	13
Fed	0	0%	0	0%	0
LGIPs	3	0%	3	0%	0
Others	537	37%	564	38%	27

Source: Treasury International Capital, iMoneyNet, Federal Reserve

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it's unclear how demand exactly shifted among this group. But in general, we suspect counterparties like corporations and hedge funds, essentially investors with excess cash but with fairly conservative cash investment guidelines, increased their holdings of Treasury bills as their cash positions built.

Looking ahead, we anticipate MMFs and other investors will gradually become a greater source of demand for Treasury bills in 2015. In the face of MMF reform and banks shedding non-operational deposits, MMFs and other investors will likely be under pressure to build their liquidity positions or increase their investments in bills as a cash substitute for prime MMFs or non-operating deposits¹. While we have not seen this dynamic play out just yet, as the TIC data is released with a two-month lag, we think this will begin to manifest itself in the coming months as more large MMFs announce their reform changes and as banks become more aggressive in reducing their non-operating deposit balances.

Coming attractions

- MS will be the next large cap bank to report Q1 earnings on 4/20, followed by 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).
- 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

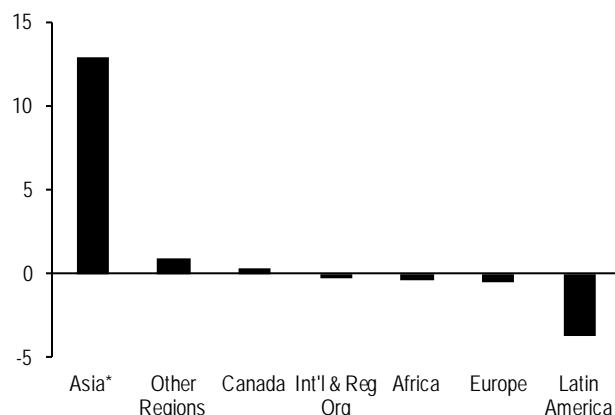
We expect short-term rates to drift upwards in 2015 in response to the beginning of a Fed tightening cycle. However, the details of how monetary policy is implemented and impact of regulations will have different effects on the various short term interest rates.

Additionally, given the immense demand for short-term product and the lack of investible supply, we do not

¹ A. Roever, "Deposit non grata: Bank regulations, deposits, and monetary policy", February 27, 2015

Exhibit 7: Asia comprised the lion's share of demand for Treasury bills with \$13bn of net buying year-to-date

YTD** chg in foreign investors' T-bill holdings by region (\$bn)



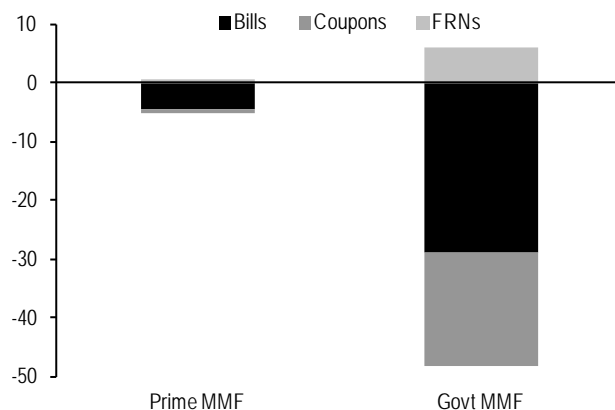
Source: Treasury International Capital

* Asia includes China, Hong Kong, India, Indonesia, Israel, Japan, Jordan, South Korea, Philippines, Singapore, Taiwan, Thailand and Asia Oil-Exporting Countries.

** YTD is from Dec 2014 to Feb 2015

Exhibit 8: MMFs reduced their aggregate exposure to Treasury securities

Change in MMF holdings of Treasury securities (\$bn)



Source: Crane Data

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*)

- **Take profits on longs in 6-month bills**

Treasury bill yields have followed their seasonal pattern and declined in April as Treasury bill supply has turned negative, and are now at the low end of their 2015 range. Conversely, repo rates have not declined materially since quarter end. Given these conflicting signals, we recommend taking profits on this trade at current levels.

– Unwind long 100% risk, or \$500mn notional of T 9/24/15 (*Treasuries*, 3/27/15). P/L since inception: +5.2bp 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**

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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 flys (2s/5s/10s, 3s/7s/10s) are likely to do well early next year. (See *Interest Rate Derivatives Outlook*)

- **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*)

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

– Continue to pay Libor in \$1bn notional of a 1Yx1Y Fed Funds/Libor basis swap (*Interest Rate Derivatives*, 4/10/15). P/L since inception: profit of 0.2bp of yield.

- **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 0.4bp 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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