

Invested in America

RESEARCH QUARTERLY

Second Quarter 2015

RESEARCH REPORT

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CAPITAL MARKETS OVERVIEW



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Issuance Highlights - Year-Over-Year					
\$ Billions	2015:Q2	2014:Q2	% Change		
Municipal	113.0	90.2	25.2%		
Treasury	530.9	559.0	-5.0%		
Mortgage-Related	441.2	304.9	44.7%		
Corporate	442.6	427.8	3.5%		
Federal Agency	89.0	69.4	28.1%		
Asset-Backed	60.1	70.6	-14.8%		
Equity	81.0	94.5	-14 3%		

Issuance Highlights - Quarter-Over-Quarter(1)

\$ Billions	2015:Q2	2015:Q1	% Change
Municipal	113.0	107.2	5.3%
Treasury	530.9	528.0	0.5%
Mortgage-Related	441.2	347.5	27.0%
Corporate	442.6	435.0	1.7%
Federal Agency	89.0	136.7	-34.9%
Asset-Backed	60.1	61.8	-2.7%
Equity	81.0	89.1	-9.1%
(1) Includes long-term issuan	ce only		

Total Issuance Increases in 2Q'15

Long-term securities issuance totaled \$1.76 trillion in 2Q'15, a 3.1 percent increase from \$1.71 trillion in 1Q'15 and a 10.1 percent increase year-over-year (y-o-y) from \$1.60 trillion in 2Q'14. Issuance fell quarter-over-quarter (q-o-q) across three asset classes: federal agency, asset-backed and equity while the remainder recorded increases.

Long-term public municipal issuance volume came in at \$110.4 billion for 2Q'15, a 6.2 percent increase q-o-q (\$104.0 billion) and 32.7 percent increase y-o-y (\$83.2 billion). With private placements included (\$2.5 billion), long-term municipal issuance for 2Q'15 was \$113.0 billion, a 5.3 percent and 25.2 percent increase, respectively, q-o-q and y-o-y.

Total gross issuance of Treasury bills and coupons, with cash management bills, Floating Rate Notes and Treasury Inflation-Protected Securities included, was \$1.69 trillion in 2Q'15, which was unchanged from 1Q'15 and a 1.1 percent decrease from 2Q'14's issuance of \$1.71 trillion. U.S. Treasury net issuance, including CMBs, fell sharply to \$56.6 billion in the second quarter, a 51.5 percent decrease from \$116.6 billion issued in the previous quarter but a much higher outcome than 2Q'14's net redemption of \$64.50 billion. Net issuance for the second quarter was 4.1 percent below the Treasury's May net borrowing estimate of \$59.0 billion.

Federal agency long-term debt issuance was \$88.9 billion in the second quarter, compared to \$130.19 billion in 1Q'15 and \$69.4 billion in 2Q'14.

Mortgage-related securities issuance, which includes agency and non-agency passthroughs as well as collateralized mortgage obligations (CMOs), reached \$441.2 billion in 2Q'15, a 27.0 percent increase q-o-q (\$347.5 billion) and a 44.7 percent gain y-o-y (\$304.9 billion). Increases were driven entirely by improve-

ments in agency issuance, as non-agency volumes declined both q-o-q and y-o-y.

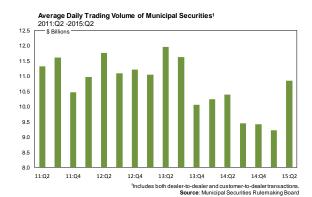
Asset-backed securities (ABS) issuance reached \$60.1 billion in 2Q'15, falling 2.7 percent and 14.8 percent, respectively, q-o-q and y-o-y. The auto industry continued to lead issuance totals with \$27.7 billion (46.1 percent of total 2Q'15 issuance), followed by credit cards (\$8.8 billion, or 14.7 percent).

Corporate bond issuance stood at \$442.6 billion in the second quarter, a 1.7 percent increase from the \$435.0 billion issued in 1Q'15 and 3.5 percent above 2Q'14's issuance of \$427.8 billion. Both the investment grade and high yield issuance showed quarterly increases with HY bonds' issuance increasing at a slightly faster pace.

Equity underwriting fell 9.5 percent to \$81.0 billion in 2Q'15 from \$89.5 billion in the previous quarter and down 14.2 percent y-o-y, but was 13.3 percent above the five-year average of \$71.5 billion. The number of equity underwriting deals dropped to 301, down 6.2 percent q-o-q and 17.5 percent from 2Q'14. The average deal size dropped to \$269.2 million in 2Q'15, a decline of 3.5 percent q-o-q but a 4.0 percent gain y-o-y.

MUNICIPAL BOND MARKET

Short-1 and Long-Term Municipal Issuance 2008 - 2015:Q2 500 400 300 100 ■Long-Tern YTD 2015 2009 2010 2011 2012 2013 2014 turities of 13 months or less Source: Thomson Reuters



Long-term public municipal issuance volume totaled \$110.4 billion in the second quarter of 2015, an increase of 6.2 percent from the prior quarter (\$104.0 billion) and 32.7 percent y-o-y(\$83.2 billion). Including private placements ¹ (\$2.5 billion), long-term municipal issuance for 2Q'15 was \$113.0 billion.

Tax-exempt issuance totaled \$99.8 billion in 2Q'15, an increase of 5.2 percent and 34.6 percent q-o-q and y-o-y, respectively. Taxable issuance totaled \$7.9 billion in 2Q'15, an increase of 15.3 percent and 27.7 percent respectively, q-o-q and y-o-y. AMT issuance was \$2.8 billion, an increase of 16.8 percent q-o-q but a decline of 4.2 percent y-o-y. Year-to-date, municipal issuance totaled \$214.5 billion, up 50.0 percent from last year and well above the 10-year average of \$186.4 billion, largely due to the surge in refundings from the first quarter.

By use of proceeds, general purpose led issuance totals in 2Q'15 (\$28.1 billion), followed by primary & secondary education (\$25.7 billion), and higher education (\$11.2 billion). Other notable sectors that saw an increase in issuance were public power (\$6.3 billion, an increase of 94.4 percent and 122.4 percent q-o-q and y-o-y, respectively), student loans (\$917.1 million, an increase of 109.8 percent and 64.2 percent q-o-q and y-o-y respectively), and seaports/marine terminals (\$525.9 million, an increase of 226.2 percent and 24.8 percent q-o-q and y-o-y, respectively).

Refunding volumes as a percentage of issuance declined from the prior quarter, with 48.6 percent of issuance refunded compared to 62.2 percent in 1Q'15 and 44.9 percent in 2Q'14.2

Yields, Inflows, and Total Return

Ratios of 10-year tax-exempt AAA GOs and similar-maturity Treasuries fell in the second quarter on a q-o-q basis but rose on a y-o-y basis, ending at 100.9 percent end-June from 103.7 percent end-March and 93.6 percent end-June 2014.

According to the Investment Company Institute (ICI), second quarter net flow into long-term municipal funds was negative, with \$1.3 billion of outflow, compared to \$8.7 billion of inflow from the prior quarter and \$7.1 billion of inflow y-o-y.

According to Bank of America-Merrill Lynch indices, municipals lost 0.97 percent in the second quarter of 2015. Build America Bonds (BABs) also had losses of 3.8 percent, performing worse than similarly-rated corporates (2.6 percent loss). Within the municipal asset class, no sector had positive returns, with pollution control, single-family housing and tobacco bonds losing the least, while transportation and toll/turnpike bonds performed the most poorly

in 2Q'15. Year-to-date, pollution control, tobacco, and hospital bonds led returns within the municipal sector.

Trading Activity and Broker-Dealers

Trading activity picked up q-o-q to \$10.9 billion daily in 2Q'15, a 17.6 percent increase from 1Q'15 (\$9.3 billion) and an increase of 4.4 percent from 2Q'14 (\$10.4 billion). By number of trades, trading activity increased 10.4 percent q-o-q and 14.6 percent y-o-y.

¹ Private placement figures are included in top line totals, but figures in charts and tables exclude this subset.

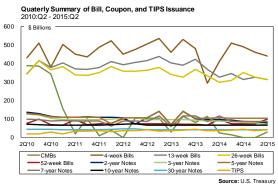
² Percentages represent both full refundings and the half the dollar amount of deals that contain both refundings and new financing. For just refunding, refunding volumes represent 37.9 percent of issuance in 2Q'15, 51.0 percent in 1Q'15, and 36.0 percent in 2Q'14.

TREASURY MARKET

Quaterly Gross Issuance of U.S. Treasury Securities 2010:Q2 - 2015:Q2 2,600 2,400 1,800 1,800 1,400 1,200 1,200 1,200 2010 4010 2011 4011 2012 4012 2013 4013 2014 4014 2015 Source: U.S. Treasury Securities 2010:Q2 - 2015:Q2 FRNs # TIPS # Coupons # CMB # Bills # Source: U.S. Treasury Securities 2010:Q2 - 2015:Q2 **Source: U.S. Treasury Securities 2010:Q2 - 2015:Q2

Net Issuances of Treasury Marketable Debt Jun. 2010 - Jun. 2015 Net Coupon Issuance (Notes and Bonds only) Net Issuance (including CMBs) Net Issuance (excluding CMBs) Net Issuance (excluding CMBs) Surre: U.S. Treasury





Gross Issuance of U.S. Treasury Securities Decreases

Total gross issuance of Treasury bills and coupons, including cash management bills (CMBs), Floating Rate Notes (FRNs) and Treasury Inflation-Protected Securities (TIPS), was \$1.69 trillion in 2Q'15, unchanged from 1Q'15 and a 1.1 percent decrease from 2Q'14's issuance of \$1.71 trillion. U.S. Treasury net issuance, including CMBs, decreased significantly to \$56.6 billion in the second quarter, a 51.5 percent decrease from \$116.6 billion in the previous quarter but a much higher outcome than 2Q'14's net redemption of \$64.50 billion. Second quarter net issuance was 4.1 percent below the Treasury's May net borrowing estimate of \$59.0 billion.³

Excluding CMBs, total net issuance of Treasury bills, notes, and bonds in 2Q'15 stood at \$26.6 billion, a 77.2 percent decrease from the net issuance of \$116.6 billion in the prior quarter but much above the net redemption of \$89.5 billion in 2Q'14. Roughly \$30.0 billion of CMBs was issued in 2Q'15, first CMBs issuance since 3Q'14 and 20.0 percent above \$25.0 billion issued in 2Q'14.

Approximately \$542.9 billion in Treasury coupons, FRNs and TIPS were issued in the second quarter, up 33.0 percent from \$409.4 billion issued in the prior quarter but 4.9 percent below the issuance of \$570.6 billion in 2Q'14⁴.

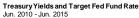
Excluding TIPS and FRNs, total gross issuance of Treasury marketable coupon securities was \$530.9 billion, a 24.9 percent increase from \$425.0 billion issued in 1Q'15 but 4.9 percent below the \$558.0 billion issued in 2Q'14. Net coupon issuance was \$139.5 billion, a 44.4 percent increase from \$96.6 billion in 1Q'15 but down 30.1 percent y-o-y.

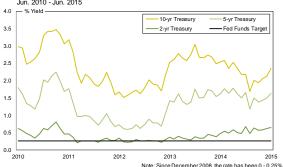
In 2Q'15, \$41.0 billion in FRNs was issued, consistent with the \$41.0 billion in 1Q'15 and each quarter since the inaugural FRN auction in January 2014. The demand for FRNs has been high with the average bid-to-cover ratio of 4.3 since the inaugural auction.

³ Treasury's May borrowing estimates can be found here.

⁴ Treasury started issuing Floating Rate Notes in January 2014.







Treasury Yield Projections and Ranges

	Jun. 30, 2015	Sept. 30, 2015E	Dec. 31, 2015E
2 year Treasury Note	0.64	0.88	1.20
		(0.70 - 1.26)	(0.85 - 1.34)
5 year Treasury Note	1.63	1.75	1.97
		(1.60 - 2.00)	(1.75 - 2.15)
10 year Treasury Note	2.35	2.36	2.50
		(2.20 - 2.60)	(2.05 - 2.60)
30 year Treasury Bond	3.11	3.00	3.13
· ·		(2.45 - 3.30)	(2.88 - 3.50)

Source: 3Q'15 SIFMA Government Forecast Survey

Trading Volume Decreases

Daily trading volume of Treasury securities by primary dealers averaged \$477.6 billion in 2Q'15, a 10.2 percent decrease from \$531.8 billion in the previous quarter and a 2.9 percent decrease from the \$492.0 billion traded daily in 2Q'14. The rolling 5-year daily trading volume average of Treasuries increased slightly to \$533.9 billion, up 2.2 percent from \$522.4 billion in the prior quarter.

Treasury Yield Curve Steepens

In 2Q'15, Treasury yields increased for all maturities, especially longer term securities. Two-year rates increased to 0.64 percent at the end of June from 0.56 percent in March, 5-year yields increased to 1.63 percent in 2Q'15 from 1.37 percent in the end of March, 10-year yields increased to 2.35 percent from 1.94 percent in 1Q'15, and 30-year yields increased to 3.11 percent in June from 2.54 percent in March.

The SIFMA Government Issuance and Rates Forecast⁵ survey respondents forecast benchmark yields to continue gradually increasing across all maturities except 30-year in the next two quarters of 2015 (summary of the projections in the table on the left).

FOMC Meeting Summary

During the most recent FOMC meeting in July 2015, the Committee judged economic activity had been expanding moderately in recent months. Growth in household spending had been moderate and the housing sector had shown additional improvement; however, business fixed investment and net exports stayed soft. The labor market continued to improve, with solid job gains and declining unemployment. After concluding its asset purchase program in October 2014, the Committee maintained its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction, which should help maintain accommodative financial conditions.⁶

The Fed reaffirmed that a highly accommodative stance of monetary policy and the exceptionally low range for the target Fed Funds rate of 0-0.25 percent

remained appropriate. In determining how long to maintain the current target range for the Federal Funds rate, the Committee will assess progress, both realized and expected, toward its objectives of maximum employment and 2 percent inflation. The Committee stated that when it decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.⁷

This quarter the survey asked the participants when they expect the Fed to raise the target rate. Respondents were split between 'September 2015' and 'later than October 2015' with 52 percent indicating that they are expecting the Fed to raise the target rate later than October 2015 and 48 percent favoring September 2015 as the timing of the first rate increase.⁸

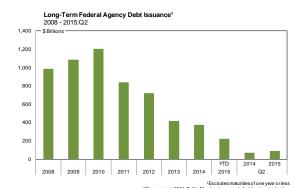
⁵ Government Issuance and Rates Forecast, 3Q'2015.

⁶ Statement from the FOMC Meeting, July 28-29, 2015.

⁷ Op. Cit. 6.

⁸ Op. Cit. 5.

FEDERAL AGENCY DEBT MARKET

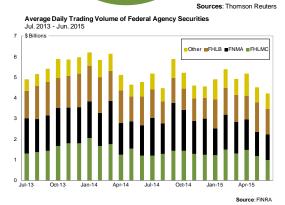


Long-Term Federal Agency Debt Issuance by Agency 2015:Q2

Freddie Mac, \$17.1B, 19%

Federal Fam Credit, \$20.8B, 23%

Federal Home Loan Banks, \$38.9B, 44%



Average Daily Trading Volume of Federal Agency Securities
Apr. 2013 - Mar. 2015

Federal agency long-term debt (LTD) issuance was \$88.9 billion in the second quarter, compared to \$130.19 billion in 1Q'15 and \$69.4 billion in 2Q'14.

The 12 Federal Home Loan Banks (FHLB) issued \$53.6 billion in LTD in the second quarter, a decrease of 1.8 percent from 1Q'15. A little more than \$1.1 trillion in short-term debt (STD) was issued in 2Q'15, unchanged from the \$1.1 trillion issued in 1Q'15. Total FHLB LTD outstanding was \$454.6 billion at quarter-end, down from the \$459.0 billion outstanding at the end of the first quarter and down from \$477.1 billion y-o-y. Discount notes increased by 12.7 percent to \$398.2 billion at the end of 2Q'15 from \$353.2 billion in 1Q'15 and 23.3 percent increase y-o-y from \$322.9 billion in 2Q'14.

Fannie Mae's 2Q'15 gross debt issuance, both STD and LTD, totaled \$56.9 billion, a decrease from \$65.9 billion in 1Q'15. STD issuance remained largely unchanged at \$49.2 billion compared with \$49.2 billion in the first quarter, while LTD issuance also remained unchanged at \$16.5 billion from in 2Q'15 from \$16.7 billion in the prior quarter. Fannie Mae had \$81.4 billion in STD outstanding at the end 2Q'15, down from \$99.4 billion as of end 1Q'15, and \$347.2 billion LTD outstanding, a decrease from \$352.9 billion in 1Q'15.

Freddie Mac's second quarter gross debt issuance totaled \$164.9 billion in 2Q'15, a 56.3 percent increase from \$105.5 billion in 1Q'15. As of quarter-end, Freddie Mac had \$93.2 billion STD and \$327.8 billion LTD outstanding, in comparison to the \$116.5 billion STD and \$337.2 billion in LTD in the prior quarter.

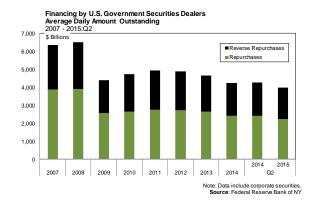
Total Farm Credit System gross debt issuance for 2Q'15 totaled \$80.8 billion. Total debt outstanding at quarter end was \$224.8 billion; of which \$19.5 billion was short-term and \$205.3 billion was long-term compared to \$20.4 billion short-term and \$201.3 billion long-term in the prior quarter.

Primary dealers polled by SIFMA in the third quarter Government Forecast survey expected gross coupon issuance for the four largest Federal agencies (FHLB, Fannie Mae, Freddie Mac, and the Farm Credit Systems) to reach \$163.0 billion in the third quarter of 2015. By agency, gross coupon issuance was expected to be \$16.5 billion for Fannie Mae, \$34.5 billion for Freddie Mac, \$89.5 billion for the FHLBs, and \$22.5 billion for the Farm Credit System.⁹

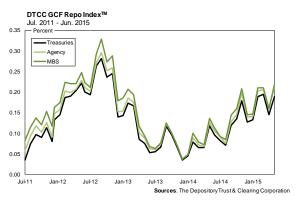
Average daily trading volume of agency securities in the second quarter was \$4.63 billion, down slightly from \$5.07 billion traded in 1Q'15 and 4.6 percent down from \$4.86 billion in 2Q'14.

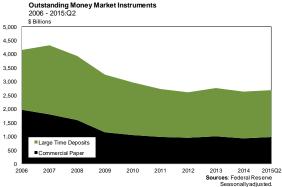
⁹ Government Issuance and Rates Forecast, 3Q'2015.

FUNDING AND MONEY MARKET INSTRUMENTS



s: Federal Reserv





Total Repurchase Activity Fell in the Second Quarter

The average daily amount of total repurchase (repo) and reverse repo agreement contracts outstanding was \$3.99 trillion in 2Q'15, a decrease of 1.2 percent from 1Q'15's average of \$4.04 trillion and a 6.4 percent decline y-o-y.

Daily average outstanding repo transactions totaled \$2.23 trillion in 2Q'15, a decline of 1.8 percent from 1Q'15. Reverse repo transactions in 2Q'15 averaged \$1.76 trillion daily, a decrease of 0.3 percent from 1Q'15.

GCF Repo Rates Rose in Second Quarter

DTCC general collateral finance (GCF) repo rates increased for Treasuries, agency, and MBS in 2Q'15: the average repo rate for Treasuries (30-year and less) rose to 17.7 basis points (bps) from 1Q'15's average rate of 15.1 bps, the average agency repo rate increased to 19.4 bps from 16.2 bps and the average MBS repo rate rose to 19.7 bps from 16.9 bps.

Total Money Market Instruments Outstanding Rose Slightly

The outstanding volume of total money market instruments (MMI), including commercial paper (CP) and large time deposits, stood at \$2.69 trillion at the end of the second quarter, up 0.2 percent from the prior quarter but a 8.4 percent decline y-o-y. CP outstanding totaled approximately \$978.8 billion, a 2.7 percent increase from the \$952.7 billion in 1Q'15 but a 10.0 percent decline y-o-y. Large time deposits outstanding totaled \$1.7 trillion in 2Q'15, a decline of 1.2 percent from 1Q'15 and a 7.4 percent decline y-o-y.

Financial and Nonfinancial 3-Month CP Interest Rates Rose

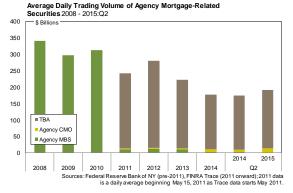
Interest rates for nonfinancial CP rose to 14 bps end-June 2015 from 11 bps end-March, while financial CP rose to 18 bps from 14 bps at the end of March.

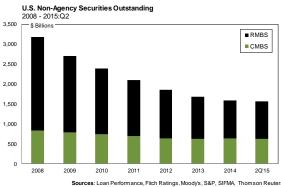
MORTGAGE-RELATED SECURITIES

| Issuance of Mortgage-Related Securities | 2008 | 2015 | 2011 | 2012 | 2013 | 2014 | 2015 | 202 | 2015 | 2025 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 | 2015 |

Issuance of Non-Agency Mortgage-Backed Securities 2008 - 2015:Q2 S Billions RMBS = CMBS 140 120 100 80 60 40 20

Sources: Bloomberg, Thomson Reuters





Mortgage-Related Issuance Increases

Issuance of mortgage-related securities, including agency and non-agency passthroughs and collateralized mortgage obligations (CMOs), totaled \$441.2 billion in the second quarter, a 27.0 percent increase from 1Q'15 (\$347.5 billion) and a 44.7 percent increase y-o-y (\$304.9 billion). Increases were driven entirely by increases in agency issuance, as non-agency volumes declined both q-o-q and y-o-y.

Overall, the agency share of issuance rose to 97.2 percent of total issuance in 2Q'15 from 94.7 percent in the prior quarter.

According to Freddie Mac, average rates on conventional 30-year fixed-rate mortgages rose 10 bps in the second quarter of 2015 to 3.82 percent from 3.72 percent in the first quarter.

Agency Issuance and Outstanding

Agency mortgage-related issuance totaled \$428.7 billion in 2Q'15, an increase of 30.2 percent and 57.0 percent, respectively, q-o-q and y-o-y. Agency MBS outstandings increased by 0.2 percent in 2Q'15 to \$6.02 trillion from the prior quarter.

Non-Agency Issuance and Outstanding

Non-agency issuance totaled \$12.5 billion in 2Q'15, a decline of 31.6 percent and 60.6 percent, respectively, from 1Q'15 (\$18.3 billion) and 2Q'14 (\$31.8 billion).

Outstanding amounts ended the second quarter at \$1.5 trillion, comprised of \$623.2 billion in CMBS and \$919.5 billion in RMBS. CMBS outstandings declined 1.2 percent q-o-q while RMBS outstanding declined 2.5 percent q-o-q. In the CMBS space, single asset, single borrower CMBS outstandings grew by 17.0 percent q-o-q and up an astonishing 74.5 percent y-o-y. Within the RMBS space, the only growth in outstandings was in scratch & dent (up 5.5 percent q-o-q), which contain deals securitized by non-performing and re-performing residential mortgage loans.

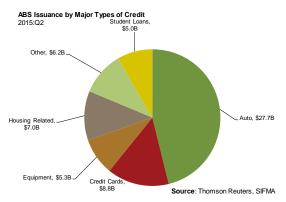
Trading Activity

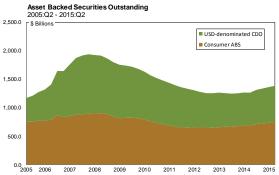
Daily trading volumes for mortgage-related securities declined in the second quarter, with declines in both agency and non-agency trading. Average daily trading volume of agency mortgage-related securities, including passthroughs, CMOs and TBAs, was \$191.3 billion in 2Q'15, a decline of 15.0 percent from 1Q'15 and a 9.4 percent increase y-o-y. Average daily trading volumes of non-agency securities declined 15.0 percent q-o-q and 8.3 percent y-o-y. Broken out, CMBS trading declined 11.9 percent q-o-q to \$1.8 billion and RMBS trading declined 18.8 percent q-o-q to \$3.5 billion daily.

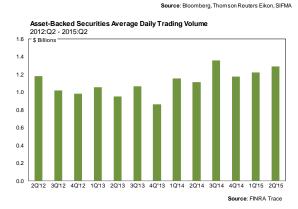
ASSET-BACKED SECURITIES

| Issuance of Asset-Backed Securities | 2008 | 2015:Q2 | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Q2 | | 2018 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Q2 | |

Source: Thomson Reuters, SIFMA







Asset-Backed Market Issuance Fell in the Second Quarter

Asset-backed securities (ABS) issuance totaled \$60.1 billion in the second quarter, a decline of 2.7 percent and 14.8 percent, respectively, q-o-q and y-o-y. The auto sector continued to lead issuance totals with \$27.7 billion (46.1 percent of 2Q'15 total issuance), followed by credit cards (\$8.8 billion, or 14.7 percent).

Sectors were mixed in issuance volume. Auto, equipment, and esoteric ABS experienced declines in issuance volume, while the balance experienced increases. Housing-related and student loan issuance saw large jumps in issuance volume (54.4 percent and 42.1 percent, respectively); the auto sector and esoteric ABS led declines in the issuance volume in the second quarter (10.2 percent and 25 percent, respectively).

Asset-backed Outstanding Continues to Grow

ABS outstanding ended 2Q'15 at \$1.38 trillion, a 1.7 percent increase q-o-q and 9.6 percent increase y-o-y. Growth was experienced in all asset classes except credit card (0.7 percent decline) and student loans (0.8 percent decline) q-o-q, similar to the prior quarter. The housing-related sector experienced particularly robust growth (19.2 percent q-o-q), having doubled in size on a y-o-y basis. Auto, equipment, other, and USD-denominated CDOs experienced growth in outstandings of 3.7 percent, 1.7 percent, 1.7 percent, and 10.2 percent, respectively.

Trading Activity Increases

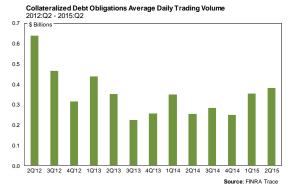
Daily average trading activity in ABS rose in the second quarter to \$1.3 billion, an increase of 5.6 percent and 16.0 percent, respectively, q-o-q and y-o-y. Including CDOs, average trading activity in 2Q'15 was \$1.7 billion daily, up 6.1 percent and 22.6 percent, respectively, q-o-q and y-o-y.

Global CDO Issuance Falls

According to Thomson Reuters, global funded collateralized debt obligation (CDO) issuance totaled \$18.2 billion in 2Q'15, a decline of 33.0 percent q-o-q (\$27.2 billion) and 59.8 percent y-o-y (\$45.2 billion). U.S. CLO issuance continues to drive most of new global CDO volume in 2015. New European CLOs have largely moved to structures that conform to the Volcker Rule.

U.S. COLLATERALIZED LOAN OBLIGATIONS¹⁰





Curre	nt		
Rank	Manager	\$ Billion	# Deals
	1 Credit Suisse Asset Management	14.26	24
	2 Carlyle Group	13.59	28
	3 Apollo Global Management	13.58	20
	4 CIFC Asset Management	13.14	34
	5 GSO Capital Partners	12.37	24
	6 Highland Capital Management	11.89	26
	7 Ares Management	11.50	25
	8 Octagon Credit Investors	8.47	16
	9 CVC Credit Partners	8.29	21
	10 Voya Alternative Asset Management	8.09	19

Current		
Rank Arranger	\$ Billion	# Deals
1 Morgan Stanley	6.45	12
2 Citi	6.39	13
3 Credit Suisse	5.10	10
4 JP Morgan	4.51	9
5 Wells Fargo	2.95	5
6 Bank of America	2.10	4
7 BNP Paribas	1.78	4
8 Goldman Sachs	1.17	2
9 Deutsche Bank	1.09	2
10 Nomura	0.71	2

CLO issuance

A flurry of CLO pricings in the final days of June were enough to ensure that half-year issuance surpassed the \$75 billion mark. Seven CLOs priced on 30 June, as managers and arrangers scrambled to finish deals ahead of July 4 – the traditional start of the "summer slowdown" in the financial markets.

Following a record first quarter, new CLO issuance continued at a consistent pace in the three months to June, with \$39.1 billion pricing across 80 deals. This is some way short of 2Q'14, which saw an incredible \$46.6 billion of primary market activity, but still means that CLO issuance is on course to match 2014's total of \$150.6 billion.

CLO refinancings

A lack of activity in the primary leveraged loan market resulted in a significant shift in CLO market dynamics towards refinancings. As of June 30, a total of 20 CLO refinancings had priced year-to-date, accounting for \$7.9 billion of issuance. Of these, 16 were completed in the second quarter. Several refinanced deals were made Volcker-compliant by removing bond buckets. However, as of May, only around 40 percent of pre-2014 CLOs had been Volcker-ised, according to research published by Citi.

Reinvestment flexibility

The second quarter saw a marked trend towards longer reinvestment periods as managers and equity investors sought additional trading flexibility. Following the precedent set by Prudential's Dryden 38 on March 25, 10 CLOs were issued in 2Q'15 with five-year reinvestment periods, rather than the four-year structure that has become the norm in the CLO 2.0 era.

All of these deals were issued with an extra year of call protection, providing additional certainty for debt investors. As a result, deals with five years of reinvestment priced significantly tight to the market. On 20 May, BlackRock's Magnetite XIV priced its triple-A notes at 139 bps over Libor – the tightest senior print since September 2013.

Secondary market

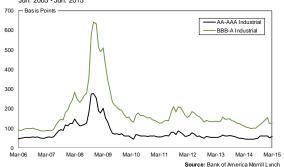
The impending deadline for US banks to comply with the Volcker rule led to a significant shift in CLO secondary market dynamics in 2Q'15. The period saw \$11.5 billion of CLOs appear on bid lists in the secondary market, according to CLO-i's b-wic tracker, with June accounting for \$5.47 billion of this figure. This represents a 52.1 percent increase on the first quarter, which saw a comparatively modest \$7.54 billion in CLO b-wics.

Notably, 51.8 percent percent of 2Q'15's b-wic volume came from triple-A tranches, compared with 26.9 percent in 1Q'15. Research published by Barclays indicates that the majority of these tranches came from non-Volcker-compliant CLOs, peaking at \$2 billion in June. A lack of demand for non-compliant paper resulted in a 15-20bp basis between compliant and non-compliant CLOs, as just 60.6 percent of triple-A notes appearing on b-wics traded in June. In contrast, an average of 88.2 percent of CLO bonds appearing on b-wics traded during 1Q'15.

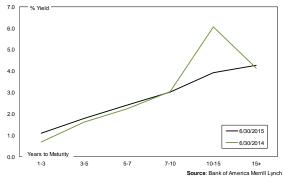
¹⁰ The author of the CLO section is James Harvey, Creditflux. For any questions, please contact James Harvey at james.harvey@creditflux.com.

CORPORATE BOND MARKET

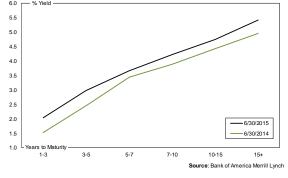
U.S. Corporate Option Adjusted Spreads to U.S. Treasury - 1-10 Year



U.S. Corporate: AAA - Yield Curves



U.S. Corporate: BBB - Yield Curves



Corporate Bond Issuance Increases

Corporate bond issuance totaled \$442.6 billion in 2Q'15, up 1.7 percent from the \$435.0 billion issued in 1Q'15 and 3.5 percent above 2Q'14's issuance of \$427.8 billion. Both investment grade (IG) sector and high yield (HY) issuance recorded quarterly increases with HY bonds' issuance increasing at a slightly faster pace. The vast majority of the bonds issued in the second quarter were for general corporate purposes (93.8 percent of total issuance), followed by funds for fees and expenses (2.2 percent), and refinancing acquisition debt (1.1 percent).

IG bond issuance increased to \$350.9 billion in 2Q'15, up 1.1 percent from \$346.9 billion in the previous quarter and 9.5 percent y-o-y. The top three industries accounted for over 60.0 percent of 2Q'15 IG issuance. Financial companies remained the leading IG debt issuance sector, representing about 35.5 percent of all IG issuance, followed by the energy and power sector with 14.6 percent of 2Q'15's issuance and the high technology sector with 10.9 percent.

Issuance of HY bonds increased to \$91.7 billion in 2Q'15, 4.1 percent above the 1Q'15 total of \$88.1 billion but below by 14.6 percent from the record breaking \$107.4 billion issued in 2Q'14. Five sectors made up over three quarters of total HY issuance in the second quarter: financials (23.2 percent), energy and power (17.1 percent), industrials (12.5 percent), materials (12.0 percent), and healthcare (11.0 percent).

Bond Spreads Tighten; U.S. Default Rate Increases Slightly

According to Bank of America-Merrill Lynch, the composite spread for AA-AAA industrial bonds and BBB-A industrial bonds widened in the second quarter of 2015. Spreads of IG bond finished the quarter at 74 bps, up 16 bps from 58 bps at the end of March and up 30 bps from 44 bps at the end of 2Q'14. HY bond spreads also tightened q-o-q, ending 2Q'15 at 135 bps, 10 bps above 125 bps in 1Q'15 and up 37 bps from 98 bps at the end of 2Q'14.

S&P's Global Fixed Income Research reported the global corporate default tally to be 33 issuers in 2Q'15, with 22 of those based in the U.S., a large increase in U.S. defaults from 10 defaults in the last quarter and 10 defaults in 2Q'14. The U.S. trailing 12-month speculative-grade corporate default rate increased to 2.0 percent in May 2015 (latest data available at publication), up from 1.8 percent in March 2015 and is expected to increase to 2.5 percent by December 2015.¹¹

In 2Q'15, S&P Ratings Services downgraded 132 and upgraded 66 U.S. issuers, a significantly worse ratio of downgrades to upgrades than in the previous quarter, when there were 79 downgrades versus 49 upgrades. The ratio of downgrades to upgrades increased to 2.00 in 2Q'15 from 1.61 in 1Q'15.

S&P US Corporate Rating Actions

	2015:Q2	2015:Q1	2014:Q2	Q-o-Q	Y-o-Y
Upgrades	66	49	80	34.7%	-17.5%
Downgrades	132	79	79	67.1%	67.1%

Source: S&P Fixed Income Research

¹¹ Standard & Poor's Rating Services, <u>The U.S. Speculative-Grade Corporate Default Rate</u>, April 30, 2015.

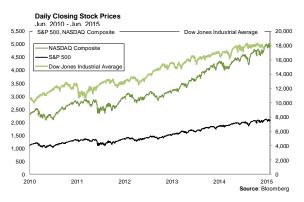
TRACE Average Daily Trading Volume - Corporate Bonds 2010:Q2 - 2015:Q2



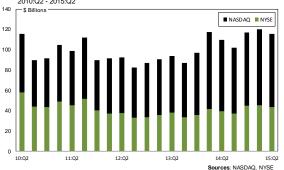
Trading Volume Decreases

According to the FINRA TRACE data, trading volumes decreased for all types of corporate bonds in 2Q'15. IG average daily trading volume fell to \$14.1 billion, down 9.6 percent from \$15.6 billion in 1Q'15 but up 7.9 percent from \$13.1 billion y-o-y. HY average daily trading volume was \$7.3 billion in 2Q'15, an 11.7 percent decrease from \$8.3 billion in the first quarter but a 2.1 percent increase from \$7.1 billion in the same year-earlier period. The average daily trading volume of convertible bonds (CVs) decreased as well in 2Q'15 to \$0.79 billion, 11.2 percent below 1Q'15's \$0.89 and 6.4 percent lower than \$0.85 billion a year ago. Private placements trading volume decreased in line with publicly traded bond falling by 6.0 percent to \$6.0 billion in 2Q'15.

EQUITY AND OTHER MARKETS







NYSE Short Interest Jun. 2010 - Jun. 2015 17 Billions of Shares 16 15 14 13

2013

2015

The S&P 500 closed the second quarter of 2015 at 2,063.11, a 0.2 percent decrease from the prior quarter but up 5.2 percent y-o-y. The NASDAQ Composite Index finished 2Q'15 at 4,986.87, a 1.8 percent gain from 1Q'15 and a 13.1 percent increase y-o-y. The Dow Jones Industrial Average (DJIA) increased slightly, finishing 2Q'15 at 17,619.51, a 0.9 percent gain q-o-q and a 4.7 percent increase y-o-y. All of those three indices recorded their all-time highs during the 2Q'15: S&P 500 reached 2,130.82 on May 21, NASDAQ Composite closed June 23 at record 5,160.10 and DJIA increased to 18,312.39 on May 19. Despite reaching record highs during the quarter, worries over Greek crisis at the end of June caused dismal q-o-q gains. Real GDP growth accelerated to an annualized rate of 2.3 percent in 2Q'15 (advance estimate), up from 0.6 percent in the previous quarter.

NYSE and NASDAQ's Daily Share and Dollar Volume Decrease

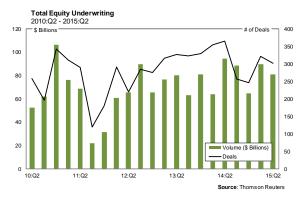
The New York Stock Exchange's (NYSE) 2Q'15 average daily share volume decreased by 4.6 percent to 1.11 billion shares from the previous quarter's 1.16 billion but up 11.1 percent from 996.5 million y-o-y. The NYSE's average daily trading volume fell by 4.0 percent to \$43.1 billion in 2Q'15 from the previous quarter's \$44.9 billion but was 10.2 percent higher than 2Q'14's \$39.1 billion.

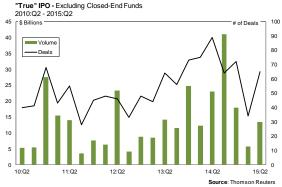
NASDAQ's average daily share volume decreased by 4.0 percent to 1.83 billion shares in 2Q'15 from 1.90 billion in the previous quarter and down 7.3 percent y-o-y. The daily trading volume fell to \$72.3 billion in 2Q'15, down 3.5 percent from \$75.0 billion in 1Q'15 but increased by 2.4 percent from 2Q'14's \$70.6 billion.

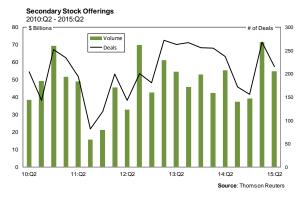
NYSE Short Interest Increases

The number of shares sold short on the NYSE averaged 15.8 billion shares in 2Q'15, up 2.9 percent from 15.3 billion during the previous quarter and 10.3 percent up from 14.3 billion in 2Q'14. The NYSE short interest was 12.2 percent above the 5-year average of 14.1 billion. Out of approximately 6,100 issues, a short position of 5,000 or more shares existed in 3,957 issues out of 4,751 short issues.¹²

¹² NYSE AND NYSE ARCA Issues Short Interest Report, July 10, 2015.









Equity Underwriting Volume Decreases

Equity underwriting decreased by 9.5 percent to \$81.0 billion in the second quarter from \$89.5 billion in 1Q'15 and was 14.2 percent below the \$94.4 billion issued in 2Q'14. Equity underwriting volume in 2Q'15 increased 13.3 percent above the five-year average of \$71.5 billion. The number of equity underwriting deals fell to 301, down 6.2 percent q-o-q and 17.5 percent y-o-y. The average deal size decreased to \$269.2 million in the second quarter, a decline of 3.5 percent q-o-q but a 4.0 percent increase y-o-y.

IPO Volume Rebounds from Two-Year Low

"True" initial public offerings (IPOs), which exclude closed-end mutual funds, rose to \$13.4 billion on 65 deals in 2Q'15, a 135.4 percent increase from \$5.7 billion but a 41.7 percent fall from \$23.0 billion on 89 deals in 2Q'14. IPO volumes rebounded from the two-year low in 1Q'15. The leading sector in IPOs in the second quarter was energy and power with \$3.2 billion raised on 5 deals, followed by high technology (\$2.6 billion on 10 deals), and healthcare (\$2.3 billion on 23 deals).

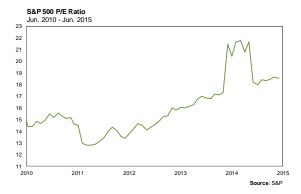
Secondary Offerings Decrease

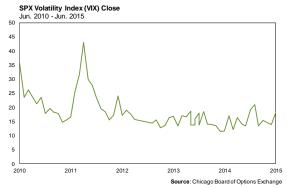
Secondary market issuance fell to \$54.6 billion on 215 deals in 2Q'15 from \$71.4 billion on 268 deals in 1Q'15 (down 23.5 percent in volume and 19.8 percent in number of deals). The average deal value for the quarter decreased by 4.7 percent to \$254.1 million from \$266.5 million in the previous quarter but up 9.2 percent y-o-y.

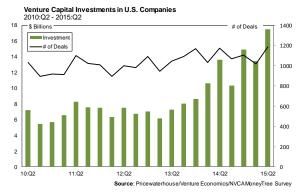
Announced M&A Volume Increases

Announced U.S. mergers and acquisitions (M&A) volume stood at \$778.2 billion in 2Q'15, a 60.0 percent increase from the previous quarter's \$486.4 billion and a 45.8 percent increase y-o-y. M&A volume was well above the 5-year quarterly average of \$380.0 billion. The number of deals decreased by 3.3 percent to 3,117 in 2Q'15 from 3,225 in 1Q'15, while the average deal size increased by 65.5 percent to \$249.7 million from \$150.8 million in the previous quarter.

According to data from Dealogic, the amount of "U.S. Inbound" M&A (money invested in U.S. companies by those outside the U.S. through M&A) increased to \$119.5 billion in 2Q'15, up 45.3 percent from \$82.2 billion in the previous quarter and 146.3 percent up from \$48.5 billion in 2Q'14. Similarly, the dollar amount U.S. companies invested in other countries though M&A ("US Outbound") increased in 2Q'15; American firms invested \$97.7 billion in deals outside of the U.S., a 63.0 percent increase from \$60.0 billion in 1Q'15 and up 69.0 percent from \$57.8 billion in 2Q'14.







S&P P/E Ratio Increases

The S&P 500's P/E ratio averaged 18.5 in 2Q'15, up 1.7 percent from the previous quarter's 18.2 but a 0.4 percent decrease from 18.6 in 2Q'14. The 5-year average increased to 16.0 in 2Q'15, still 16.1 percent below the all-time high of 22.1 in 4Q'09.

CBOE VIX Index Decreases

The Chicago Board Options Exchange Volatility Index (VIX) fell to an average of 13.7 in the second quarter from an average of 16.6 in 1Q'15. The index decreased to a low of 12.1 on May 21 and June 23 and then spiked late in the quarter to a high of 18.9 on June 29 largely due to investor concerns over Greece. The spread between high and low values for the VIX was much narrower in 2Q'15 than in the previous quarter.

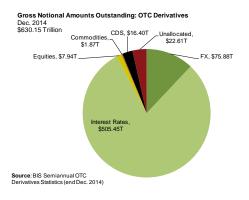
Venture Capital Volume Increases

Venture capitalists invested \$17.5 billion in 1,189 deals in the second quarter of 2015, according to the MoneyTreeTM Report from PricewaterhouseCoopers LLP (PwC) and the National Venture Capital Association (NVCA), based on data provided by Thomson Reuters. Quarterly venture capital (VC) investment activity increased by 30.4 percent in dollars terms and by 16.6 percent in the number of deals compared to the first quarter of 2015 when \$13.4 billion was invested in 1,020 deals. The second quarter is the sixth consecutive quarter of more than \$10 billion of venture capital invested in a single quarter and it is the highest quarterly total since \$22.0 billion in 4Q'00.

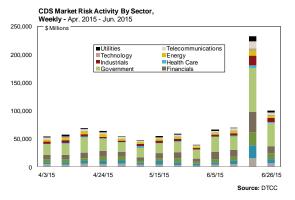
The software industry continued to receive the highest level of funding of all industries, increasing 30.4 percent from the prior quarter to \$7.3 billion on 491 deals in 2Q'15, up 30.4 percent in volume and 13.1 percent in number of deals from 1Q'15. The capital raised was the largest quarterly investment total going into software companies since the inception of the MoneyTree Report in 1Q'95. The media & entertainment industry was the second largest industry in volume invested with \$2.7 billion going into 118 deals and biotechnology industry captured the third largest total for dollars invested in 2Q'15 with \$2.3 billion going into 126 deals.¹³

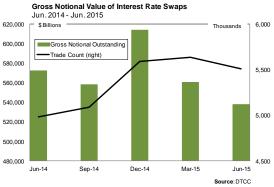
¹³ PricewaterhouseCoopers MoneyTree, <u>Q2 2015 Press Release</u>, July 17, 2015.

DERIVATIVES



Gross Notional Value of Interest Rate Swaps Jun. 2014 - Jun. 2015 620 000 6.000 600,000 Gross Notional Outstanding -Trade Count (right) 580 000 5,500 560,000 5.000 520,000 500,000 480,000 4.500 Jun-14 Mar-15 Jun-15 Source: DTCC





According to the most recent Bank of International Settlements (BIS) Semiannual Over-the-Counter (OTC) Derivatives Markets Statistics Report, the gross notional amount outstanding of OTC derivatives totaled \$630.2 trillion as of end-December 2014 (down 8.9 percent from end-June 2014) Credit default swaps (CDS) (down 15.7 percent to \$16.4 trillion), commodity swaps (down 15.3 percent to \$1.9 trillion), interest rate swaps (IRS) (down 10.3 percent to \$505.5 trillion) and unallocated contracts (down 8.9 percent to \$22.6 trillion) all decreased from end-June 2014. Only equities (up 12.1 percent to \$7.9 trillion) and foreign exchange contracts (up 1.5 percent to \$75.9 trillion) saw increases from end-June 2014. The gross credit exposure of outstanding OTC derivatives increased 18.8 percent to \$3.4 trillion during the same period.

Interest Rate Swaps

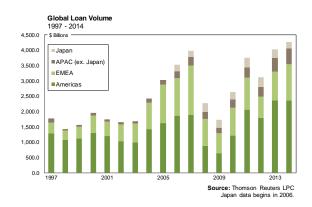
According to DTCC data, the gross notional value outstanding of IRS at end-June 2015 was \$537.7 trillion, down 5.8 percent from end-March 2015's \$560.4 trillion. While q-o-q increases were found in inflation swaps (up 8.2 percent) and basis swaps (up 7.2 percent), these were more than offset by decreases in debt options (down 36.0 percent), callable swaps (down 14.3 percent), overnight index swaps (down 12.8 percent) and forward rate agreements (down 9.81 percent).

The number of contracts outstanding decreased 2.2 percent q-o-q to 5.5 million. Increases in basis swaps (up 7.2 percent) and inflation swaps (up 5.0 percent) were offset by decreases in callable swaps (down 16.1 percent), forward rate agreements (down 9.8 percent), debt options (down 8.2 percent) and cross-currency exotic swaps (down 8.0 percent).

Credit Default Swaps

According to DTCC data, the gross notional value outstanding of CDS, including single names, tranches and indices, declined 4.4 percent to \$14.0 trillion at end-June 2015 from end-March, and fell 25.1 percent y-o-y. Single name CDS gross notional outstanding decreased 2.2 percent q-o-q to \$7.6 trillion at end-June 2015. The most oft-referenced entities outstanding by gross notional exposure in the second quarter were concentrated in sovereigns, led by Italy (\$376.2 billion), Turkey (\$136.8 billion), Russia (\$135.9 billion), Brazil (\$128.7 billion), Spain (\$125.4 billion) and France (\$103.1 billion).

GLOBAL PRIMARY LOAN MARKET¹⁴



1H'15 global loan volume down 17 percent despite quarter over quarter increase in 2Q'15

The supply demand imbalance across the global loan market was the headline story in 1H'15. Despite notable successes in the context of M&A and a resurgence of refinancings, the global loan market was slower than investors and arrangers would have liked through 2Q'15. At \$932 billion, 2Q'15 global loan volume was up 8 percent compared to 1Q'15 totals to bring year to date issuance to just under \$1.8 trillion. Second quarter loan volume was nonetheless down 25 percent compared to year ago figures and 1H'15 volume was down 17 percent year over year.

At nearly \$590 billion, the Americas represented 63 percent of total 2Q'15 global loan volume, although the region experienced a 13 percent decline compared to the same time last year. Quarter over quarter, Americas loan volume was up 38 percent in 2Q, to support over \$1 trillion of lending in the first half.

Shy of \$200 billion, 2Q'15 Europe, the Middle East and Africa (EMEA) syndicated loan volume was down 50 percent year over year and a more restrained 21 percent off 1Q15 totals (\$249 billion), bringing 1H'15 totals to \$446 billion, a 26 percent decline compared to 1H'14 (\$602 billion).

For both the Americas and EMEA, the smaller, half year totals are rooted in a slowing of refinancing volume and a limited calendar of completed acquisition financings. In EMEA, although refinancings made up 70 percent of total lending in 2Q'15, at less than \$140 billion, refinancing volume marked the lowest quarterly total in two and a half years.

In the Americas, 61 percent of total 2Q'15 volume represented refinancings, up from 50 percent in 1Q'15. On a dollar basis, the \$357 billion raised was on par with quarterly averages since the credit crisis.

In sync with its regional peers and despite an increase over 1Q'15 results, Asia-Pacific loan volume, at \$113 billion, slipped 20 percent in 2Q'15 compared to the year ago period (\$141 billion) as regional growth slowed amid softening consumer demand and fewer exports. Volume for the first six months of the year came in at \$214 billion, down 15 percent compared to the same time last year (\$252 billion).

Lack of supply despite good liquidity

Technicals remained strong but volatility returned to the loan market. While lender capacity was deep and appetite robust, the market became more selective despite the lagging supply of deals.

At \$378 billion, new money represented 41 percent of total global volume for the quarter. 1H'15 new money totaled nearly \$828 billion, up 7 percent compared to the year ago period. Proportionally, in the Americas, new loan assets (\$230 billion) repre-sented 39 percent of total regional issuance, flat compared to 1Q'15 but up from the 29 percent share garnered the same time last year. More noteworthy, 61 percent of total global new money was raised in the Americas in 2Q and at over \$445 billion, the new dollars raised in 1H'15 represented a 28 percent increase compared to 1H'14 totals.

At nearly \$59 billion, EMEA new money lending represented 30 percent of total regional volume, down from the 35 percent logged in 1Q'15 but up from the 27 percent recorded in 2Q'14. More significantly, 2Q'15 total new money loan volume was down 45 percent year over year and once again, reminiscent of historical quarterly lows. At \$145 billion, 1H'15 EMEA new money was down 12 percent year over year.

¹⁴ The author of the primary loan section is Maria Dikeos, Thomson Reuters LPC. For any questions, please contact Maria Dikeos: maria.dikeos@thomsonreuters.com

In Asia-Pacific, just under \$59 billion in new money lending worked its way through the market, the lowest quarterly total since 4Q'12, and down 29 percent compared to the year ago period. Treasurers were more conservative when planning capital expenditures given the slowing pace of growth. China was a notable exception, pushing through a number of infrastructure and project finance

credits in 2Q'15, but even these deals had little to no impact on regional lender liquidity since many favored Chinese policy banks at the exclusion of regionally based international banks.

Limited visibility to developing M&A calendar

M&A delivered a number of opportunities across the regions. 2Q global M&A volume was just under \$146 billion, down 8 percent compared to 1Q'15 totals and a more sobering 17 percent compared to 2Q'14 results. Global M&A closed out the first six months at \$305 billion, a decline of 5 percent compared to the same time last year.

At less than \$81billion, 2Q'15 M&A issuance in the Americas was down 33 percent compared to 2Q'14. Despite much chatter and several noteworthy announcements, completed loan financings were down 26 percent quarter over quarter as well. In Latin America, smaller M&A deals remained viable but larger credits evaporated with few expectations of a meaningful uptick in 2015. In

contrast, in the U.S., over \$95 billion of M&A loan financings was slated to work its way through the market in the second half of the year, although lenders note that given current visibility and the lead time required for M&A deals to come together, any new, unannounced deals will probably be 4Q or even 2016 financing events.

In EMEA, less than \$44 billion of M&A issuance cleared the market, flat compared to 1Q'15 totals (over \$42 billion) but off 11 percent compared to the nearly \$49 billion raised in 2Q'14. At about \$86 billion, 1H'15 EMEA M&A volume increased 13 percent com-pared to 1H'14 figures, but was still less than 20 percent of total volume for the region.

"The visible forward calendar that people know about is not huge," notes one Europe based lender. "The less visible, developing calendar is not massive either – we don't expect a [big] supply in 3Q."

In APAC, a dismal start to the year from the point of view of acquisition financings, was reversed as over \$17 billion in M&A volume was raised in the second quarter. This was three times 1Q'15 totals (\$4 billion) and almost two times year ago figures to bring 1H'15 volume to north of \$21 billion. Still, the results need to be taken in context: Year over year, 1H'15 volume was down 24 percent. More importantly, 2Q'14 regional M&A loan volume represented a thin, 10 percent of regional totals and over 50 percent was concentrated among two jumbo deals.

Ho-hum loan market in 2H15?

Despite the backdrop of limited dealflow, globally, lenders nonetheless are scrutinizing the deals that do cross their desks more carefully. In the Americas, much of the due diligence is rooted in the regulatory landscape and looming SNC reviews.

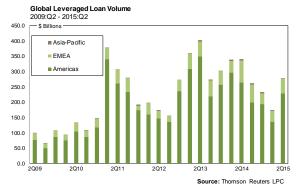
Among investment grade lenders, the adoption of Basel III reforms remains uneven although most concede that over the next two to three years, the playing field will even as everyone grapples with the fallout from Liquidity Coverage Ratio and the practical implications of capital requirements. In the near term, lenders predict there will be a pickup in M&A but given regulatory focus, what is less certain is whether there is still unlimited capacity for bridges and plain vanilla refinancings.

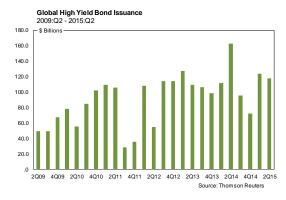
"Everyone will need to think about how they lend, even if they do not need to raise new capital" says one U.S. based investment grade arranger.

Investment grade issuers in the Americas are expected to continue to keep tenors fresh, but some lower-rated names are expected to take the year off if they feel that the refinancing exercise is too much work and potential spread benefits are limited or nil.

"There is the tension among banks of having a lot of costs that are increasingly associated with providing capital. This does not support a reduction of pricing. Clients tend to understand that, although there are a few that may put pressure on a bank if they have enough wallet," explains one arranger. "But that one deal that gets done at a lower spread does not become a benchmark for

additional across the board price cuts."





In the leveraged space, the impact of the supply demand imbalance and the uncertain build up of the forward calendar is even more mired in regulatory uncertainty. At \$279 billion, 2Q'15 global leveraged loan volume was up 60 percent compared to 1Q'15 (\$174 billion) but down 18 percent year over year. 1H15 global leveraged loan issuance totaled \$453 billion, a 33 percent decline compared to the same time last year (\$679 billion). Refinancings gained traction to appease asset-hungry investors given the limited pipeline of new money deals.

In the Americas, leveraged lenders pushed almost \$230 billion of issuance through the market in 2Q'15, a 68 percent uptick from 1Q'15 figures (\$136 billion). In the U.S. specifically, over 65 percent of the total represented refinancings. A paltry \$11 billion repre-sented buyout financings, the lowest quarterly total in three years, as private equity firms struggled to compete with corporates for acquisition targets amid rising valuations.

In EMEA, "it was an issuer market prior to the Greece crisis," according to one arranger of leveraged deals. "But it's a big enough market that it can handle a bit of volatility and not have a seizure."

At \$48 billion 2Q'15 EMEA leveraged loan volume was up 37 percent compared to 1Q'15 but down 32 percent year over year. Total volume was \$83 billion for the first six months of this year, down 23 percent compared to the same time last year. European lenders note that while there is a fair bit of cash for deals to get done, "anyone who is price sensitive is not coming to market right now." While demand for assets remains robust, lenders note there has been a reasonable amount of constructive resistance to lower pricing thresh-

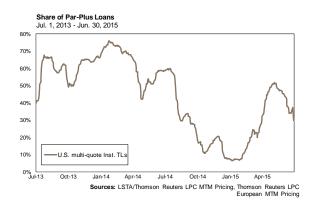
olds. Both Orion Engineered Carbons and Constantia Flexibles pulled back repricings at the end of the quarter, not because they could not get done, but because they could not get done at the price that issuers wanted.

"We are definitely seeing an increasingly nimble market across products and geographies," says one arranger.

TI Automotive's \$1.3 billion term loan buyout facility is an example. The company moved funding out of unsecured bonds into secured bonds and rejiggered its loan structure, upsizing its U.S. dollar and euro tranches.

Away from the loan space, the high yield bond market remained strong in spite of intermittent outflows. At \$118 billion, global issuance was down 4 percent compared to 1Q'15 totals. In EMEA, there has been a decent widening of yield given the Greek credit crisis but the loan market has remained less affected for the moment.

SECONDARY LOAN MARKET¹⁵





Loan market technicals support secondary market prices

The year so far has been marked by a lack of net new loan issuance and continued robust demand for assets. This constrained new money supply has resulted in the size of the U.S. institutional loan market, as measured by the S&P/LSTA Leveraged Loan Index, growing by only \$3.4 billion (0.4 percent) so far in 2015. In comparison, the market grew by \$75 billion or 11 percent in the same period a year ago. This year, new money supply via the LBO market has faced varying degrees of resistance due to high valuations, competition from corporates flush with cash, and the impact of leveraged lending guidance on banks.

Investor demand for loans on the other hand has been strong with CLO issuance surpassing expectations and institutional money continuing to come into other vehicles like separately managed accounts. Retail funds in contrast have been the exception with outflows outpacing inflows for much of this year.

The technical pressures from the robust demand have provided support for prices in the secondary market and at times provided the perfect backdrop for higher bids. The share of par-plus loans reached as high as 52 percent in May, creating a ripe environment for an uptick in refinancing and repricing volume, not exactly investors' preferred choice of investment opportunity.

Making things harder for investors this year is that banks have snapped up a larger share of the smaller leveraged loan issuance pie. The pro-rata share of leveraged loan issuance jumped to 59 percent this year, up from 45 percent and 52 percent in full year 2013 and 2014, respectively.

In Europe, it's been broadly the same story with leveraged loan issuance not keeping up with demand from the likes of CLOs, and refinancings accounting

for over half of volume in the first half of the year.

Overall, bids have shifted upwards this year, with U.S. multi-quote institutional term loans gaining close to 50 bps and the flow name SMi100 up 102bp through early July. In Europe, the Lev40 has gained 87 bps. In terms of overall returns, U.S. loans were up 2.83 percent in first half 2015, according to the S&P/LSTA Leveraged Loan Index.

In the last two months, U.S. secondary market prices have eased, with the average bid on multiquote institutional loans off as much as 90 bps from their recent high in early May. At the same time, the share of par-plus loans declined by 19 percentage points to 33 percent as of early July. Among more liquid names, the drop in par-plus share was even more pronounced with the SMi100 par-plus share falling as low as 25 percent (though it bounced back to 41 percent last week) from 65 percent. Still, despite the recent softening, loans remain well bid, with the flow name SMi100 at 99.57 and the broader universe of multi-quote institutional loans close to 97.75. In Europe the flow name Lev40 softened in June, finishing the month down 70 bps to 99.80, with most of that decline coming near the end of the month. The Lev40 par-plus share fell sharply at the end of the month to 44 percent, though it has moved higher again following the gain in prices last week.

In the U.S., oil and gas loans, in contrast to the broader market, have confronted more volatility in 2015. After a difficult end to last year and start to this year, oil and gas loan assets recovered some lost ground in the second quarter before hitting a weak patch again in June.

Oil and Gas loan bids dropped by nearly 200 bps in June, but were still down only 22 bps overall in 2Q15. For the first half of the year, oil and gas bids were down 227 bps, with the average bid ending the quarter at 88.06 and slipping further to 87.63 in early July. That said, price levels do vary by

¹⁵ The author of the secondary loan market section is Colm Doherty, Thomson Reuters LPC. For any questions, please contact Colm Doherty: colm.doherty@thomsonreuters.com

Oil & Gas Prices Subsector Bid Levels

subsector, with midstream (98.33) and downstream (94.10) credits bid higher on average, while is-

suers in the upstream subsector (87.17) and services subsector (84.49) were bid lower.

105.00 Average Bid (% of Par)

100.00

95.00

90.00

85.00

Upstream Midstream Downstream Services

Source: Thomson Reuters LPC

U.S. and European CLO AUM
Jul. 2013 - Jun. 2015

600.0

S Billions

600.0

100.0

100.0

7/13 9/13 11/13 1/14 3/14 5/14 7/14 9/14 11/14 1/15 3/15 5/15

Source: Thomson Reuters LPC Collateral

Since May, the upward pressure on loan prices has dissipated as loan mutual funds and ETFs have seen outflows again and prices in the near-by high yield bond market retreated in June and early July. After two straight months of inflows, loans funds suffered outflows of \$1.2 billion in June. Outflows this year total \$6 billion. In turn, loan mutual fund & ETF assets under management declined to roughly \$137 billion in June, and are down 3 percent year-to-date. Unsurprisingly, loan funds share of the institutional market has declined to 15 percent.

The U.S. CLO market on the other hand managed to overcome worries around risk retention and posted an impressive \$58.3 billion of CLO issuance in first half 2015, not far off the \$60.8 billion recorded in the same period a year ago. A record month of issuance in March gave way to sharp declines in April (\$11.8 billion) and May (\$5.7 billion) before bouncing back to \$11 billion in June. New deals have continued to come on stream with another \$4.4 billion of CLO issuance added in the first half of July.

Allowing for redemptions and amortizations, Thomson Reuters LPC estimates that net new CLO issuance tops \$40 billion in first half 2015. This brings U.S. CLO assets under management to over \$413 billion and increased CLOs ownership share of institutional loans to nearly 50 percent, up four percentage points since the start of the year.

European CLO issuance was also robust in 1H15, amounting to €7.8 billion, up from 6.9 billion euros in the same period last year, and helping to edge assets under management up to the 68 billion euros area.

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