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**RESEARCH QUARTERLY**  
**2Q 2012**

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**RESEARCH REPORT**

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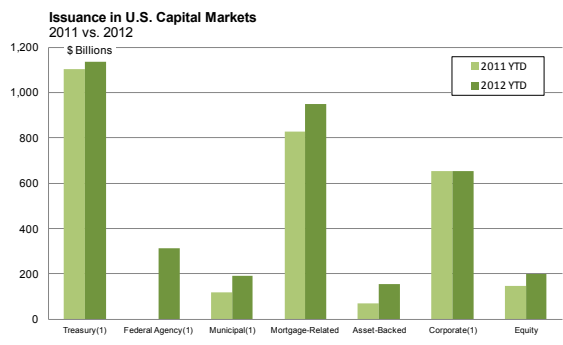
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## CAPITAL MARKETS OVERVIEW



(1) Includes long-term issuance only  
Source: Thomson Reuters, U.S. Treasury, U.S. Federal Agencies

### Issuance Highlights - Year-Over-Year

\$ Billions	2012:Q2	2011:Q2	Y-o-Y % Change*	2012 YTD
<b>Treasury</b> <sup>(1)</sup>	573.0	555.2	3.2%	1,136.0
<b>Federal Agency</b> <sup>(1)</sup>	161.7	147.7	9.5%	314.0
<b>Municipal</b> <sup>(1)</sup>	114.2	69.0	65.5%	192.2
<b>Mortgage-Related</b>	465.7	367.1	26.9%	951.6
<b>Asset-Backed</b>	53.1	37.5	41.6%	153.5
<b>Global CDO</b>	6.5	1.9	232.5%	10.9
<b>Corporate</b> <sup>(1)</sup>	245.8	282.6	-13.0%	652.6
<b>Equity</b>	64.8	68.8	-5.9%	198.4

\* Percent change between 2012:Q2 and 2011:Q2

### Quarter-Over-Quarter

\$ Billions	2012:Q2	2012:Q1	Q-o-Q % Change*
<b>Treasury</b> <sup>(1)</sup>	573.0	562.9	1.8%
<b>Federal Agency</b> <sup>(1)</sup>	161.6	152.4	6.0%
<b>Municipal</b> <sup>(1)</sup>	114.2	78.7	45.1%
<b>Mortgage-Related</b>	465.7	485.9	-4.2%
<b>Asset-Backed</b>	53.1	47.4	12.0%
<b>Global CDO</b>	6.5	4.4	48.2%
<b>Corporate</b> <sup>(1)</sup>	245.8	406.8	-39.6%
<b>Equity</b>	64.8	59.8	8.3%

\* Percent change between 2012:Q2 and 2012:Q1

<sup>(1)</sup> Includes long-term issuance only

### Total Issuance Fell in Second Quarter 2012

Securities issuance totaled \$1.68 trillion in the second quarter of 2012, a 6.3 percent decrease quarter-over-quarter (q-o-q) but a 10.1 percent increase year-over-year (y-o-y).

On June 20, 2012, the Federal Reserve indicated that the economic activity was expanding at a more moderate pace than earlier in the year, noting that the growing concerns about the euro area and weaker-than-expected U.S. economic data continued to weigh on financial markets.<sup>1</sup> According to the Bureau of Economic Analysis, U.S. gross domestic product (GDP) increased at an annual rate of only 1.5 percent in 2Q'12, down from the 2.0 percent increase in 1Q'12. The unemployment rate remained persistently elevated, ending June at 8.2 percent, unchanged from March. European sovereign woes continued to weigh on the fundamentals in the second quarter, culminating in tense Greek elections mid-June.

The Fed reiterated its intention to keep the target Fed Funds rate at 0-0.25 percent at least through late 2014 and announced the expansion of its 'Operation Twist' program through December 2012. The Fed plans to sell \$267 billion in shorter-term debt and buy the same amount of longer-term securities to extend the maturities of assets held on its balance sheet.

The equity markets fell slightly in the second quarter 2012. The S&P 500 closed 2Q'12 at 1,362.16 (a 3.3 percent decrease q-o-q), the NASDAQ Composite Index finished the first quarter at 2,935.05 (a 5.1 percent decrease from 1Q'12), and the Dow Jones Industrial Average (DJIA) decreased as well, finishing 2Q'12 at 12,880.04 (a 2.5 percent decrease q-o-q).

Total gross issuance of Treasury bills and coupons, including cash management bills, was \$1.83 trillion in 2Q'12, 8.1 percent under the \$1.99 trillion issued in 1Q'12 but slightly above 2Q'11's \$1.82 trillion. In 2Q'12, the total issuance of coupons rose to \$573.0 billion, a 1.8 percent and 3.2 percent increase, respectively, from 1Q'12 and 2Q'11.

Federal agency long-term debt issuance was \$161.6 billion in the second quarter, a 6.0 percent and 9.5 percent increase respectively, from 1Q'12 and 2Q'11.

Municipal issuance volume totaled \$114.2 billion in the second quarter of 2012, an increase of 45.1 percent from 1Q'12, and an increase of 65.5 percent from 2Q'11.

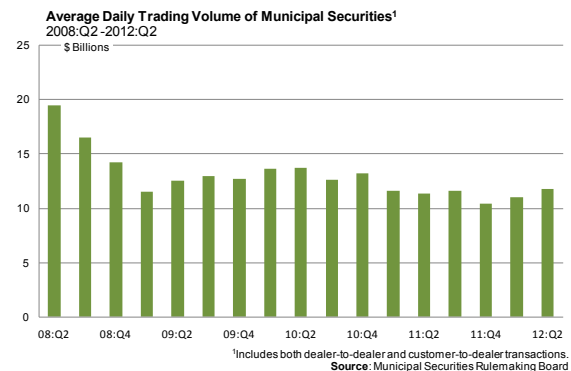
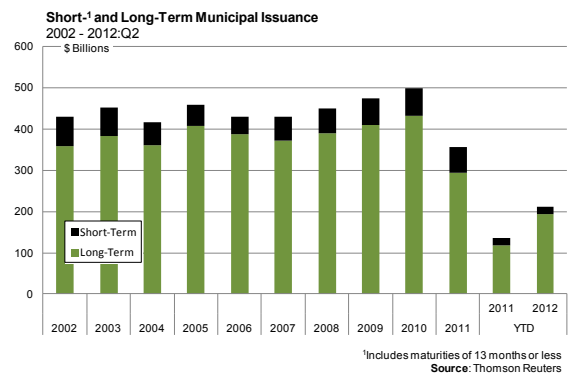
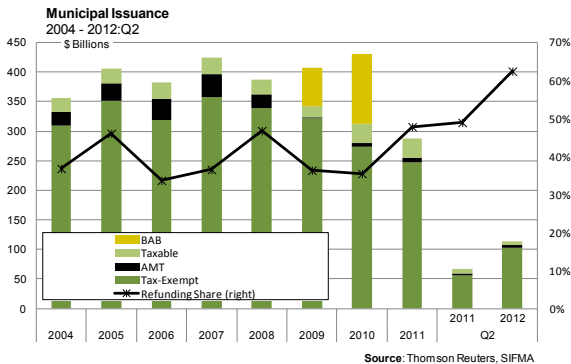
Issuance of mortgage-related securities, including agencies and non-agency pass-throughs and collateralized mortgage obligations, totaled \$465.7 billion in the second quarter, a 4.2 percent decrease and a 26.9 percent increase, respectively from 1Q'12 and 2Q'11.

Asset-backed securities (ABS) issuance totaled \$53.1 billion in the second quarter, an increase of 12.0 percent and 41.6 percent, respectively, from 1Q'12 and 2Q'11. Global funded collateralized debt obligation (CDO) issuance totaled \$6.5 billion, an increase of 48.2 percent from 1Q'12 and 232.5 percent from 2Q'11.

Total corporate bond issuance fell to \$245.8 billion in 2Q'12, a 39.6 percent and 13.0 percent decrease, respectively, from the past quarter and 2Q'11.

<sup>1</sup> [Minutes of the Federal Open Market Committee](#), June 19-20, 2012.

# MUNICIPAL BOND MARKET



According to Thomson Reuters, long-term municipal issuance volume, including taxable and tax-exempt issuance, totaled \$114.2 billion in the second quarter of 2012, a 45.1 percent and 65.5 percent increase, respectively, quarter-over-quarter and year-over-year. Refundings as a percentage of issuance remained elevated as issuers sought to take advantage of low rates; approximately 62.5 percent of issuance in 2Q'12 was derived from refundings, down slightly from the 66.7 percent in 1Q'12 but well above 48.9 percent in 2Q'11. Year-to-date, municipal issuance totaled \$191.2 billion, slightly below the 10-year average of \$194.3 billion.

Tax-exempt issuance totaled \$103.4 billion in 2Q'12, an increase of 44.9 percent and 83.6 percent, respectively, from 1Q'12 and 2Q'11. Taxable issuance increased to \$6.6 billion in 2Q'12, up 14.6 percent from 1Q'12 but down 16.8 percent from 2Q'11, when several Congressionally-authorized taxable bond programs were still active.

Based on use of proceeds, general purpose led issuance totals in 2Q'12 (\$32.4 billion), followed by primary & secondary education (\$17.3 billion), water and sewer facilities (\$12.0 billion), and hospital (\$10.8 billion), although a significant portion were refundings, rather than new money issues.

According to the Investment Company Institute (ICI), second quarter inflow into long-term municipal funds remained positive, although down q-o-q, with \$11.2 billion of inflow, compared to \$16.4 billion in 1Q'12 and \$2.8 billion of outflow in 2Q'11.

Trading activity increased q-o-q in 2Q'12 to \$11.8 billion daily average, a 7.1 percent increase from 1Q'12 and a 3.9 percent increase y-o-y. The daily average number of trades increased slightly q-o-q (2.8 percent), but declined y-o-y (down 8.5 percent).<sup>2</sup>

## Government Update

In June 2012, the Governmental Accounting Standards Board of the Financial Accounting Foundation (GASB) approved a pair of documents that modified accounting and financial pension reporting by state and local governments and pension plans, which in turn may result in higher pension expense s.<sup>3</sup>

The U.S. Government Accountability Office (GAO) released a report in April on the fiscal outlook of state and local governments, noting that “the fiscal position of the sector will steadily decline through 2060 absent any policy changes.”<sup>4</sup> GAO attributed the operating balance decline to be driven primarily by “rising health-related costs of state and local expenditures on Medicaid and the cost of health care compensation for state and local government employees and retirees.”

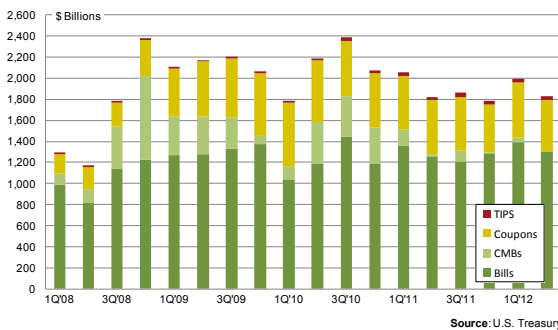
<sup>2</sup> Based on averaging daily values reported on EMMA's market activity; values reported in yearbooks and quarterly statistics will be higher as those statistics include short-term trades and non market-trades (e.g., for repo purposes).

<sup>3</sup> GASB, “GASB Improves Pension Accounting and Financial Reporting Standards,” June 25, 2012.

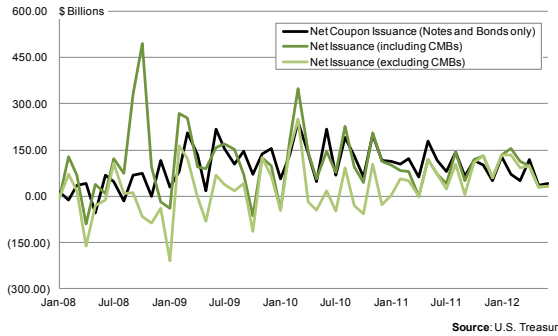
<sup>4</sup> U.S. Government Accountability Office, “State and Local Governments' Fiscal Outlook,” April 2, 2012.

## TREASURY MARKET

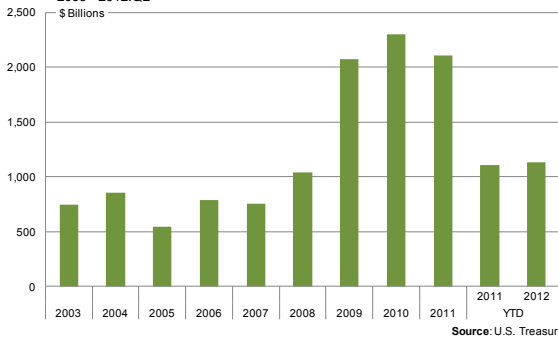
Quarterly Gross Issuance of U.S. Treasury Securities  
2008:Q1 - 2012:Q2



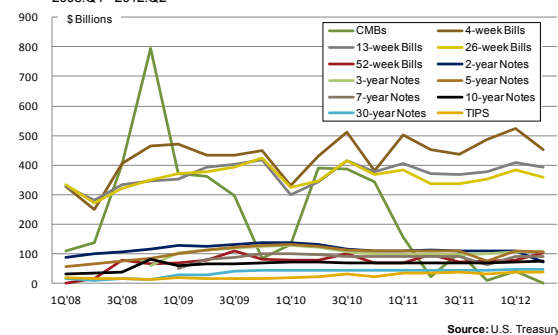
Net Issuances of Treasury Marketable Debt  
Jan. 2008 - Jun. 2012



Gross Issuance of U.S. Treasury Marketable Coupon Securities  
2003 - 2012:Q2



Quarterly Summary of Bill, Coupon, and TIPS Issuance  
2008:Q1 - 2012:Q2



### Issuance of U.S. Treasury Securities Increases

Total gross issuance of Treasury bills and coupons, including cash management bills (CMBs), was \$1.83 trillion in 2Q'12, 8.1 percent below the \$1.99 trillion issued in 1Q'12 but a 0.4 percent increase from 2Q'11's issuance of \$1.82 trillion. Total second quarter net issuance of U.S. Treasury securities, including CMBs, decreased to \$160.9 billion, down 59.9 percent from the previous quarter's \$401.2 billion and 15.2 percent below the \$189.7 billion issued in 2Q'11. The 2Q'12 issuance of \$160.9 billion in net marketable debt was 11.6 percent below the Treasury's April 2Q'12 borrowing estimate of \$182 billion.

Excluding CMBs, total net issuance stood at \$160.9 billion in 2Q'12, a 55.5 percent decrease from \$361.2 billion in the prior quarter. No CMBs were issued during the second quarter.

Approximately \$527.8 billion in Treasury coupons plus Treasury Inflation-Protected Securities (TIPS) were issued in the second quarter, 6.2 percent below the \$562.6 billion issued in the prior quarter and 4.0 percent below 2Q'11's issuance of \$549.9 billion.

Excluding TIPS, total gross issuance of Treasury marketable coupon securities was \$491.4 billion, a 6.4 percent decrease from the \$525.2 billion issued in 1Q'12 and 4.7 percent lower than the \$515.7 billion issued in 2Q'11.

Net coupon issuance for 2Q'12 was \$196.9 billion, 20.4 percent below 1Q'12's \$247.3 billion and down 44.8 percent y-o-y. Net coupon issuance has been declining steadily since 1Q'10, when it stood at \$433.2 billion for a cumulative decline of 54.5 percent through 2Q'12.

Gross issuance of bills, including CMBs, was \$1.30 trillion in 2Q'12, an 8.9 percent decrease from last quarter's \$1.43 trillion but a 2.4 percent increase from the \$1.27 trillion issued during the same year-ago period.

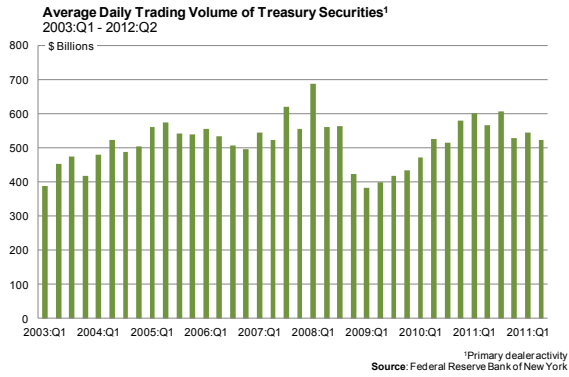
During the July 31 Treasury Borrowing Advisory Committee meeting<sup>5</sup>, the committee and the U.S. Treasury continued to discuss the viability of using Floating Rate Notes (FRNs), with the committee unanimously favoring FRN issuance as soon as operationally possible. Following the meeting, the U.S. Treasury announced its intention to develop a FRN program in its August U.S. Treasury quarterly refunding statement, estimating that the first auction would be at least one year away.<sup>6</sup>

### Trading Volume Decreased in 2Q'12

After a modest pick-up in trading activity in 1Q'12, average daily trading volumes decreased in the second quarter of 2012. Daily trading volume of Treasury securities by primary dealers averaged \$522.9 billion in 2Q'12, compared to \$544.3 billion in the prior quarter (a 3.9 percent decline) and \$567.3 billion in 2Q'11 (a 7.8 percent decline).

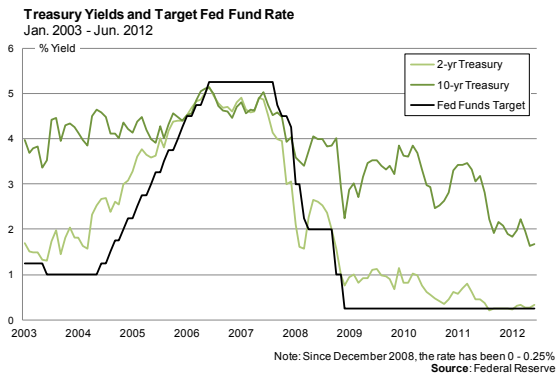
<sup>5</sup> [Minutes of the Meeting of the Treasury Borrowing Advisory Committee](#), August 1, 2012.

<sup>6</sup> [August 2012 Quarterly Refunding Statement](#), August 1, 2012.



### Treasury Yields Fall

In 2Q'12, Treasury yields declined across all maturities. Two-year rates decreased to 0.31 percent at the end of June from 0.33 percent in March 2012, 5-year yields dropped sharply to 0.73 percent in the end of June from 1.04 percent, and 10-year yields declined to 1.66 percent from 2.22 percent in March. Looking ahead, primary dealers polled by SIFMA expect the rates to remain flat on the front end of the curve and gradually increase through December 2012 for longer maturities. The survey forecasted benchmark 2-year Treasury yields to decrease to 0.29 percent in 3Q'12 and then rebound to 0.31 percent through the fourth quarter of 2012, 5-year yields to increase gradually to finish 3Q'12 at 0.75 percent and the year at 0.83 percent, and 10-year rates to rise to 1.73 percent in the end of September and to 1.95 percent by the end of full-year 2012.<sup>7</sup>



<sup>7</sup> See SIFMA [Government Forecast 3Q'12](#).

## FEDERAL AGENCY DEBT MARKET

### Agency LT Debt Issuance Increases Q-o-Q

Federal agency long-term debt (LTD) issuance was \$161.6 billion in the second quarter, a 6.0 percent increase from 1Q'12 but a 24.9 percent decline y-o-y. Overall, average daily trading volume of agency securities (coupons and discount notes) increased in the second quarter to \$43.8 billion, compared to the \$42.3 billion daily average traded in the prior quarter. More generally, the federal agencies continued to reduce their overall debt funding structure through reduction of their reliance on short-term funding. Short-term debt outstanding has declined by 22.0 percent year-over-year, compared to the 1.3 percent increase in long-term debt, for a net decline of 4.3 percent.

The 12 Federal Home Loan Banks (FHLBs) issued \$87.3 billion in LTD in the second quarter, an increase of 31.2 percent and 43.3 percent, respectively, from 1Q'12 (\$66.5 billion) and 2Q'11 (\$60.9 billion). A little more than \$917.5 billion in short-term debt (STD), generally in the form of discount notes, was issued in 2Q'12, an increase of 26.4 percent q-o-q but a decline of 61.9 percent y-o-y.

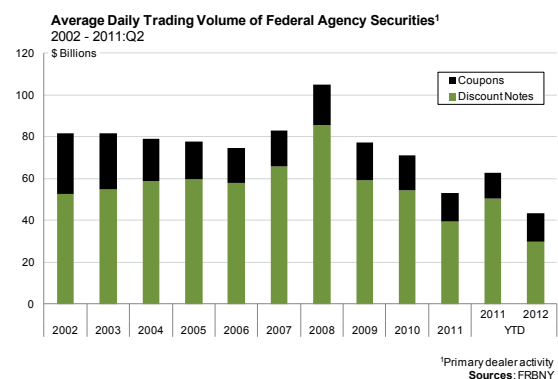
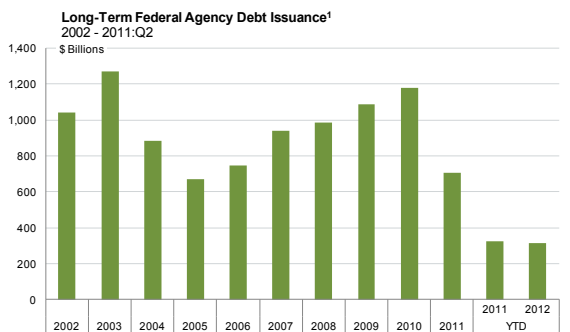
Total FHLB long-term debt outstanding was \$487.7 billion as of June 30, 24.0 percent above the \$476.3 billion outstanding at the end of the first quarter but down nearly 11.0 percent y-o-y from \$546.5 billion. Discount notes outstanding increased to \$196.3 billion at end-June 2012 from end-March 2012 (\$181.7 billion) and end-June 2011 (\$172.3 billion).

Fannie Mae's 2Q'12 gross debt issuance, both STD and LTD, totaled \$119 billion, up 13.6 percent and down 46 percent, respectively, from 1Q'12 (\$104.7 billion) and 2Q'11 (\$220.5 billion). STD issuance increased to \$53.5 billion, a 18.4 percent increase q-o-q but down 38.6 percent y-o-y, while LTD issuance of \$65.5 billion was up by 10.1 percent q-o-q but down 50.9 percent y-o-y. As of quarter-end, Fannie Mae had \$92.9 billion in STD and \$574 billion LTD outstanding, a decline of 16.2 percent and 4.0 percent, respectively, from the prior quarter.

Freddie Mac's second quarter gross debt issuance totaled \$99.2 billion, a 24.0 percent decrease from 1Q'12 (\$130.6 billion) and a 40.0 percent decrease from 2Q'11 (\$165.4 billion). As of quarter-end, Freddie Mac had \$130.1 billion STD and \$459.5 billion LTD outstanding, a decline of 3.5 percent and 7.1 percent, respectively, from the prior quarter.

Total Farm Credit System bond issuance totaled \$128.6 billion as of June 30, 2012, and total debt outstanding ended the second quarter at \$188.9 billion. As of quarter-end, Farm Credit had \$15.0 billion STD and \$174.0 billion LTD outstanding, a decline of 2.8 percent and increase of 8.0 percent, respectively, from 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 \$195 billion in the third quarter of 2012.<sup>8</sup> By agency, gross coupon issuance was expected to be \$48 billion for Fannie Mae, \$50 billion for Freddie Mac, \$75 billion for the FHLBs, and \$22 billion for the Farm Credit System.

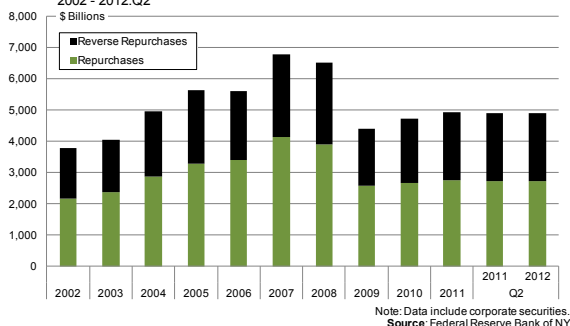


<sup>8</sup> See SIFMA's [U.S. Government Forecast 3Q'12](#)

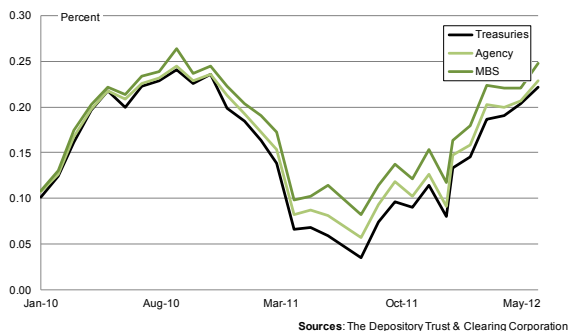


## FUNDING AND MONEY MARKET INSTRUMENTS

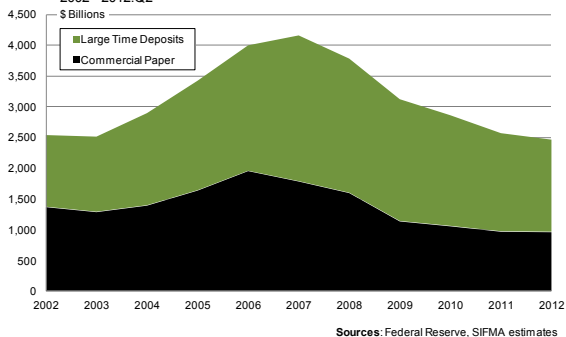
**Financing by U.S. Government Securities Dealers**  
Average Daily Amount Outstanding  
2002 - 2012:Q2



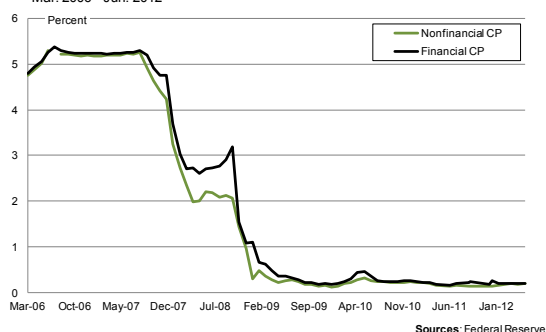
**DTCC GCF Repo Index™**  
Jan. 2010 - Jun. 2012



**Outstanding Money Market Instruments**  
2002 - 2012:Q2



**Financial & Nonfinancial Commercial Paper 3-Month Interest Rates**  
Mar. 2006 - Jun. 2012



### Total Repurchase Activity Rises in Second Quarter<sup>9</sup>

The average daily amount of total repurchase (repo) and reverse repo agreement contracts outstanding increased to \$4.88 trillion in 2Q'12. This represents a slight increase from 1Q'12's average of \$4.84 trillion, yet a 0.34 percent decrease y-o-y.

Daily average outstanding repo transactions totaled \$2.72 trillion in 2Q'12, up 0.73 percent from 1Q'12, while reverse repo transactions averaged nearly \$2.15 trillion, a 1.02 percent increase from 1Q'12.

### Treasuries, Agency and MBS Repo Rates Rise

In 2Q'12 the DTCC GCF Repo rates increased for Treasuries, agency debt, and MBS. Specifically, the repo rate for Treasuries (30-year and less) increased to 0.221 percent from 0.187 percent in 1Q'12. The agency repo rate rose to 0.228 percent from 0.203 percent, and the MBS repo rate increased to 0.248 percent from 0.224 percent. More generally, the use of agency MBS as collateral for repo has grown in the past year, with approximately 37.8 percent by dollar amount of triparty repo collateralized by agency MBS in June 2012, compared to 29.3 percent in the previous year.

### Total CP Outstanding Decreases

The outstanding volume of total money market instruments (MMI), including commercial paper (CP) and large time deposits, stood at \$2.5 trillion at the end of the second quarter, 5.0 percent below the \$2.6 trillion in 1Q'12 and a 14.6 percent decrease y-o-y. CP outstanding totaled approximately \$962 million, a 3.2 percent decrease from the \$994 million in 1Q'12 and a 11.1 percent decrease y-o-y. Large time deposits totaled \$1.5 trillion in 2Q'12, a decrease of 6.2 percent from 1Q'12 and a 16.7 percent decrease y-o-y from \$1.8 trillion.

### Financial and Nonfinancial 3-Month CP Interest Rates Rise

The interest rates for financial and nonfinancial CP rose in the second quarter of 2012. Financial CP's rate was 0.21 percent at the end of 2Q'12, 1 bps higher than the 0.20 percent in 1Q'12 and 4 bps higher than 2Q'11's 17 bps. The rate for nonfinancial CP rose to 0.21 percent in 2Q'12, a 3 bps increase from 1Q'12's 0.18 percent and a 6 bps increase from 2Q'11's 0.15 percent.

<sup>9</sup> As a reminder, repo data is provided by the primary dealers only:

<http://www.newyorkfed.org/markets/gsdsearch.cfm>. For a breakdown of tri-party repo data, please refer to the Federal Reserve Bank of New York's Tri-party Repo Reform website here: [http://www.newyorkfed.org/tripartyrepo/margin\\_data.html](http://www.newyorkfed.org/tripartyrepo/margin_data.html).



# MORTGAGE-RELATED SECURITIES

## Mortgage-Related Market

Issuance of mortgage-related securities, including agency- and non-agency pass-throughs and collateralized mortgage obligations (CMOs), totaled \$465.7 billion in the second quarter of 2012, a 4.2 percent decline from 1Q'12 (\$485.9 billion) but an increase of 24.7 percent from 2Q'11 (\$373.5 billion). Non-agency commercial mortgage-backed securities (CMBS) issuance increased rose for the second consecutive quarter, further reducing the agency share of issuance from 98.6 percent in 1Q'12 to 97.8 percent in 2Q'12. However, non-agency residential mortgage (RMBS) issuance remained moribund.

The housing market continued its slow recovery in 2Q'12. The Case-Shiller 20-City Composite Index, after reaching a low of 136.6 in January 2012, rose to 139.93 in May 2012, an increase of 1.6 percent from end-March 2012 and an increase of 2.6 percent from the January low. Housing prices continued to recover in all housing markets except Detroit in the second quarter, with the largest gains in Phoenix, Arizona.

## Agency Issuance and Outstanding

Agency mortgage-related issuance totaled \$455.5 billion in 2Q'12, a decline of 4.9 percent q-o-q, but an increase of 26.5 percent from 2Q'11. While activity from Ginnie Mae picked up in the second quarter, activity from both Freddie Mac and Fannie Mae declined, leading to an overall issuance decline. Net issuance remained slightly positive as agency MBS outstandings increased by 0.2 percent in the second quarter from 1Q'12; notably, while single family MBS outstandings declined slightly in 2Q'12 to \$5.42 trillion from \$5.43 trillion, multifamily MBS outstandings increased to \$221.2 billion, up 6.3 percent from \$208.1 billion in 1Q'12.

Home Affordable Refinance Program ("HARP") refinancing picked up in 2Q'12, increasing 34.7 percent with 242.8 thousand refinanced mortgages from 1Q'12's 180.2 thousand refinanced mortgages. Average rates on 30-year mortgages continued to fall to new lows, ending in June at 3.68 percent, down 27 basis points from the 3.95 percent end-March 2012 and 83 bps from end-June 2011 (4.51 percent).

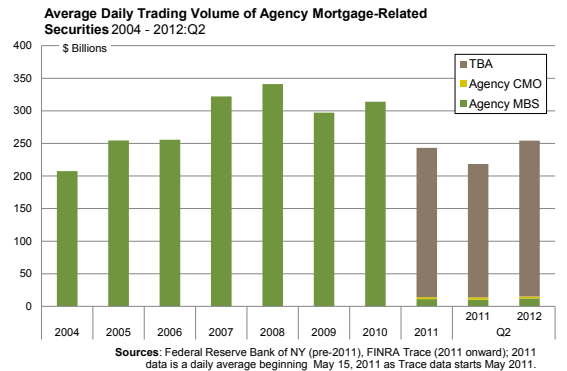
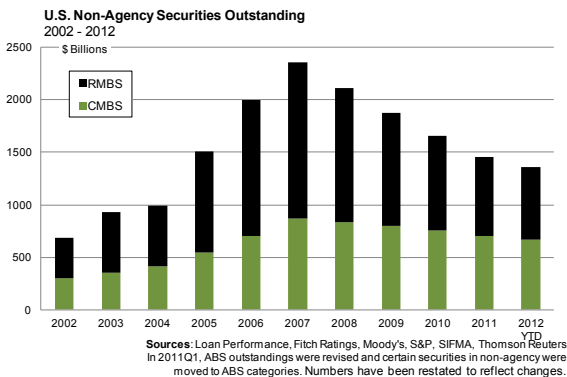
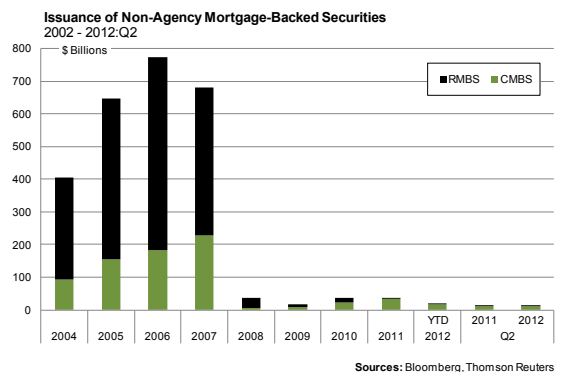
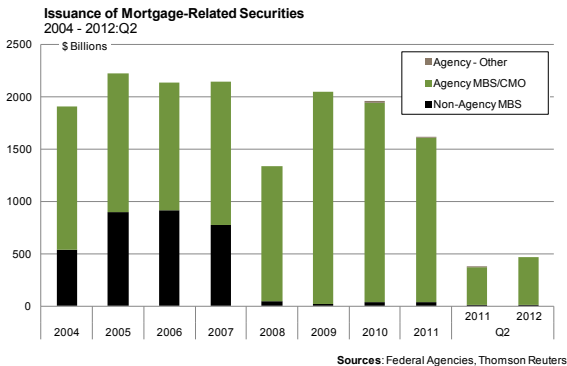
## Non-Agency Issuance and Outstanding

Non-agency issuance totaled \$10.2 billion in 2Q'12, an increase of 48.6 percent q-o-q (\$6.9 billion) but a decline of 8.0 percent y-o-y (\$11.1 billion). Non-agency issuance continues to be derived largely from CMBS issuance. Outstandings continue to decline, with an estimated \$1.35 trillion outstanding at end-June, down 3.5 percent from 1Q'12 (\$1.4 trillion). Declines in non-agency RMBS were more rapid than in the non-agency CMBS space.

While short-dated AAA-rated CMBS spreads tightened by 16.3 bps end-June from end-March, 5-year AAA-rated CMBS spreads, as well as both 3- and 5-year BBB-rated CMBS spreads, widened.

## Trading Activity

Average daily trading of agency mortgage-related securities, including pass-throughs, CMOs and TBA, was \$254.2 billion in 2Q'12, a decline of 16.8 percent from 1Q'12 (\$305.3 billion average daily trading). Average daily trading of non-agency CMBS and RMBS in 2Q'12 was \$1.8 billion and \$1.9 billion, respectively, a decline of 38.7 percent and 43.1 percent, respectively, from 1Q'12.



# ASSET-BACKED SECURITIES

## Asset-Backed Market & CDO

Asset-backed securities (ABS) issuance totaled \$53.1 billion in the second quarter of 2012, an increase of 11.9 percent and 41.6 percent, respectively, from 1Q'12 (\$47.4 billion) and 2Q'11 (\$37.5 billion). The auto sector continues to lead issuance totals, with \$24.1 billion sold (45.4 percent of total issuance in 2Q'12).

Outside of autos, credit card gross issuance picked up with \$12.1 billion issued in 2Q'12, more than double 1Q'12 issuance (\$5.5 billion) and nearly four times 2Q'11 issuance (\$3.2 billion). Equipment also saw a rise in issuance, with \$5.4 billion issued in 2Q'12, compared to \$5.0 billion issued in 1Q'12.

Both the auto and, more notably, the student loan sectors saw positive net issuance for the second quarter, with outstandings growing by 7.4 percent and 1.2 percent, respectively, from 1Q'12. Student loan securitizations, however, have been largely student loan refinancings from failed student loan auction rate securities (ARS) and funding conduits markets rather than newly originated student loans. For the first time since 2008, collateralized loan obligations (CLO) outstandings have also seen a small positive net growth as several U.S. CLOs have been brought to market in 2012.

The remainder of ABS sectors, however, continued to see negative net issuance, ultimately leading to declines in outstanding balances in ABS overall. Declines in outstandings q-o-q were the greatest in credit cards (10.6 percent), equipment (6.3 percent), and structured finance CDOs (8.3 percent).

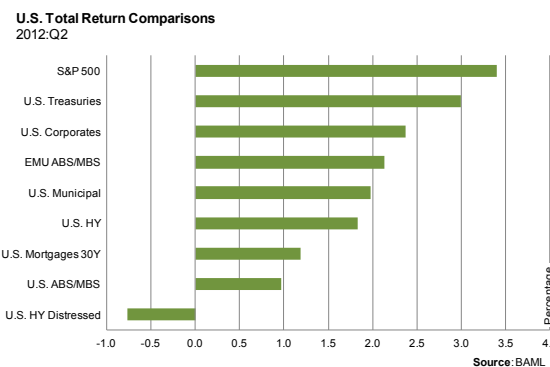
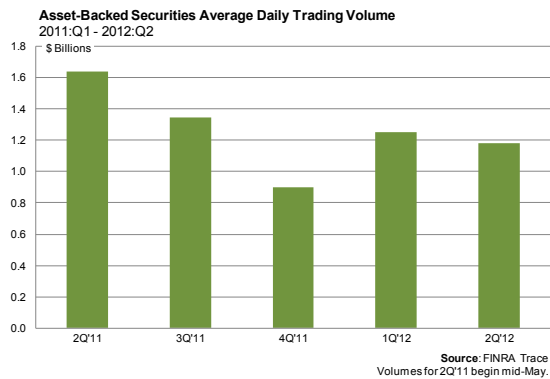
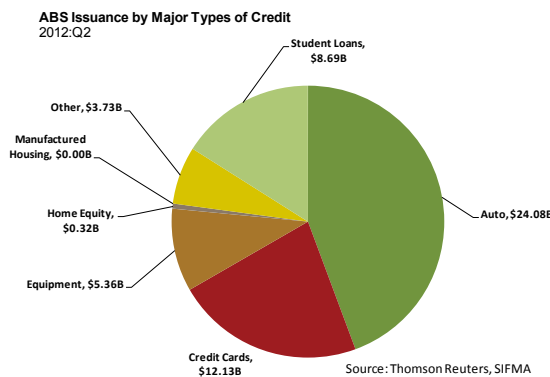
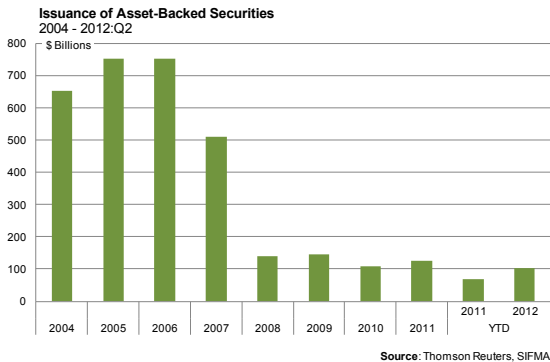
Partly due to limited supply in the U.S. securitization market, interest has picked up in European ABS, particularly UK credit cards. Year-to-date, \$4.5 billion of UK credit card issuance has been denominated in USD and sold predominantly to U.S. investors. This volume represents approximately 8.1 percent of all placed European securitizations in 2012.

### Trading Activity Declines; Total Return Positive But Weaker

Daily average trading activity in ABS declined slightly in the second quarter to \$1.20 billion, a decline of 5.5 percent from the \$1.25 billion traded daily in 1Q'12.

According to the Merrill Lynch indices, the total return for ABS and CMBS was 0.97 percent in 2Q'12, down from the 2.07 percent total return in 1Q'12 and 1.08 percent in 2Q'11. The sector underperformed almost all the major U.S. asset classes.

The Federal Reserve continued to auction assets from its securities holdings in the Maiden Lane I and III portfolios, enabling the full repayment of their loans from the Federal Reserve Bank of New York mid-June. The Maiden Lane I portfolio, comprised of mortgage-related securities, was acquired during the collapse of Bear Stearns in 2008; the Maiden Lane III portfolio was acquired from AIG and comprised largely of high grade ABS CDOs.<sup>10</sup>



<sup>10</sup> See [Maiden Lane Transactions](#) for more detail.

# COLLATATERIALIZED DEBT OBLIGATIONS<sup>11</sup>

Global funded CDO issuance totaled \$6.5 billion in 2Q'12, an increase of 48.2 percent from 1Q'12 and 232.4 percent from 2Q'11. Including those deals with unavailable manager data, global funded CDO issuance was \$20.6 billion year-to-date. U.S. CLO issuance in particular has picked up substantially in 2012.

## U.S. CLO Issuance Spikes To \$12.7 billion in 2Q'12

Primary market activity correlated with CLO spread tightening. In the second quarter of 2012, \$12.7 billion of new issue CLO paper was printed, just shy of total issuance for the full-year 2011 (\$12.9 billion). By number of deals, a total of 29 CLOs were priced in 2Q'12, up from the 15 deals launched in 1Q'12. Of the 15 managers who raised CLOs in the first quarter, eight launched their second CLO of the year during the second quarter of 2012.

The quarter represents the busiest quarter of activity since the CLO market came to a standstill in 4Q'07. In particular, April was the busiest month in the primary CLO market since December 2007, with \$5.7 billion of new issuance.

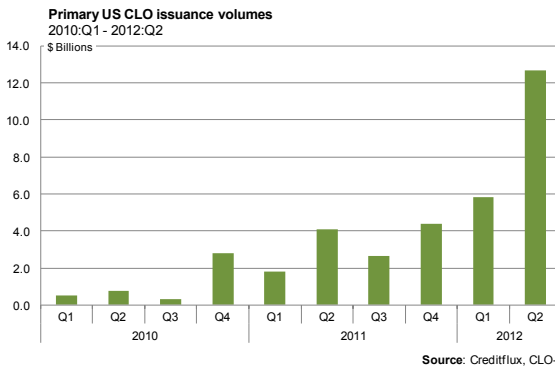
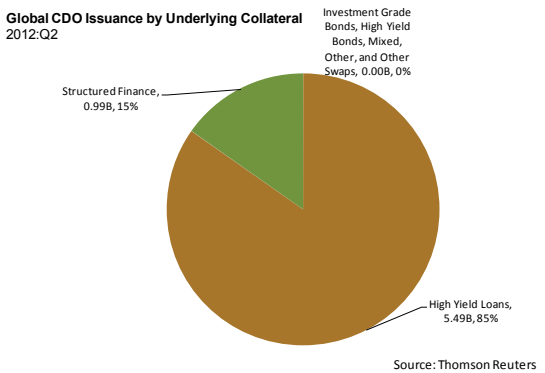
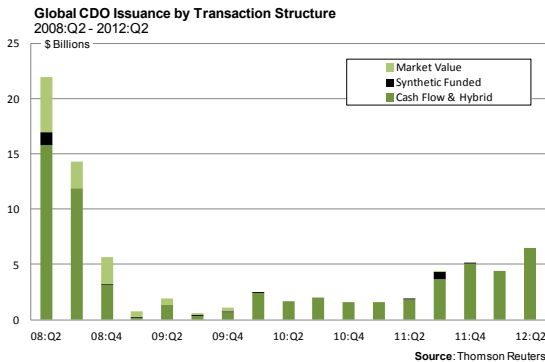
## CLO Spreads Tightened, then Widened, in 1H'12

Triple-A CLO spreads opened at 155 bps above LIBOR at the beginning of 2012 and tightened to 130 bps by April, the tightest level since August 2011. However, CLO spreads began to gradually widen for the remainder of the second quarter, and by end-May, triple-A spreads had climbed back up to 137 bps before ending the quarter at 149 bps, similar to levels seen at the beginning of the year.

In light of tightening spreads in the beginning of April, CLO managers were encouraged to raise new CLOs and continued to price new deals even after CLO spreads began widening. As the arbitrage opportunity between the CLO market and widening spreads in the underlying loan market remained compelling, \$4.0 billion of new CLOs managed to price in June despite wider spreads.

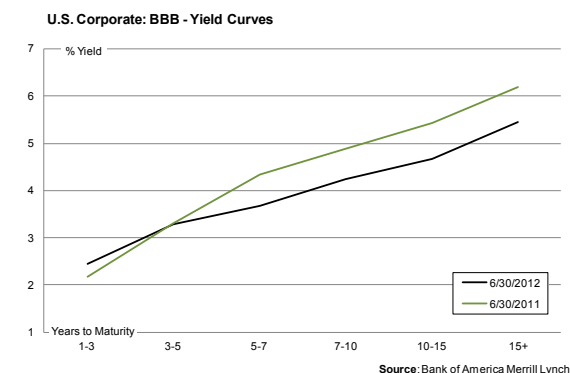
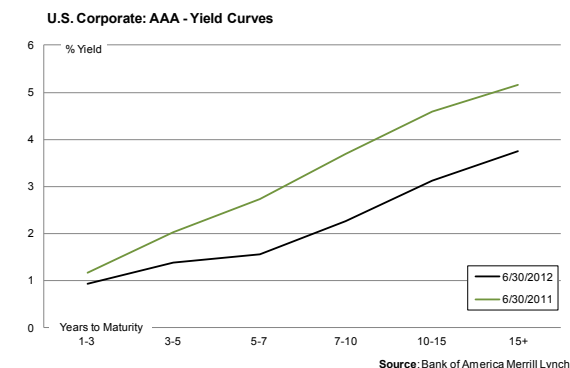
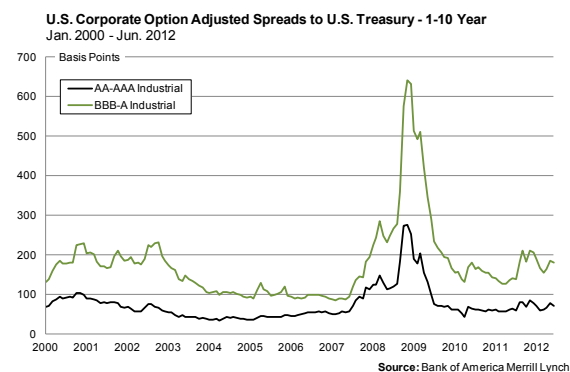
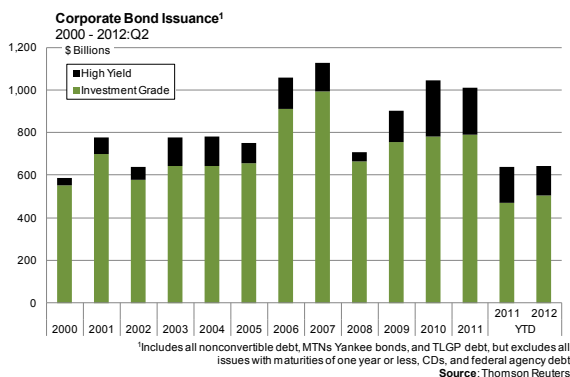
## Secondary CLO Trading Volumes Fall

While the new issue CLO market thrived during the second quarter, trading volumes in the secondary CLO market dampened slightly. Total trading volumes of U.S. CLO paper in the secondary market totaled \$4.5 billion during the quarter, under the \$5.4 billion total traded in 1Q'12, but still well above the \$3.5 billion traded in 2Q'11.



<sup>11</sup> The author of the CLO section is Sayed Kadiri, Creditflux. For any questions, please contact Sayed Kadiri at sayed.kadiri@creditflux.com.

# CORPORATE BOND MARKET



## Corporate Bond Issuance Drops 40 Percent

Total corporate bond issuance totaled \$239.8 billion in 2Q'12, 10.5 percent below the \$403.2 billion issued last quarter and down 13.5 percent y-o-y. As the U.S. economy continued to recover at a slower-than-expected pace and worries about the European sovereign debt crisis resurfaced, corporate issuance decreased significantly. Another reason for the large drop in corporate debt issuance in 2Q'12 was very high issuance volumes in the previous quarter due to maturity wall concerns, as well as refinancing the maturing debt from the Temporary Liquidity and Guarantee Program (TLGP). The issuance of corporate debt for refinancing purposes decreased to \$84.9 billion in 2Q'12, down 30.3 percent q-o-q, but remained high compared to no debt issued for refinancing purposes in 2Q'11.

Investment grade (IG) bond issuance decreased in 2Q'12 to \$191.8 billion from \$312.6 billion in the previous quarter and from \$194.4 billion in 2Q'11, a 38.6 percent and an 1.3 percent decline, respectively. Although the volume of IG Bonds issued for refinancing purposes declined 24.4 percent q-o-q, the share of refinancing as a percent of total IG issuance rose to 31.7 percent from 25 percent. Financial companies remained the leading industry in IG debt issuance and accounted for 34.0 percent of the IG bonds issued in 2Q'12, followed by energy and power with 17.9 percent.

The issuance of high yield (HY) bonds stood at \$47.9 billion in 2Q'12, down 47.1 percent from the record quarterly issuance of \$90.6 billion in 1Q'12 and 42.2 percent below the \$82.9 billion issued in the second quarter of 2011. Over half of total 2Q'12 HY issuance was directed toward refinancing or redeeming other bonds or notes. The issuance of HY bonds for refinancing purposes decreased by 40.8 percent to \$27.1 billion from \$45.7 billion in 1Q'12 but increased as a percentage of total issuance to 57 percent from 50 percent in 1Q'12.

## Spreads Widen; U.S. Default Rates Fall

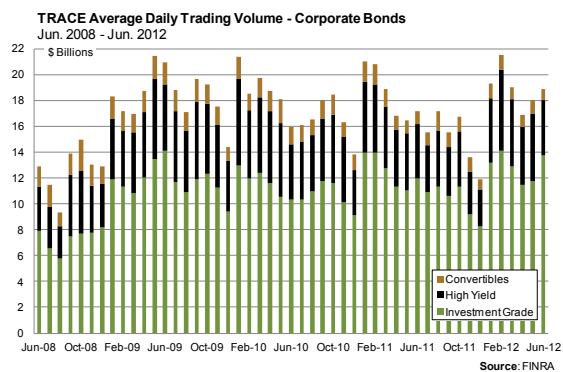
According to S&P, composite spreads for both IG and HY bonds widened about 10 percent in the second quarter of 2012. IG bond spreads finished the quarter at 224 bps, 9.8 percent higher than 204 bps at the end of 1Q'12 but 7.8 percent below the 5-year moving average of 243 bps. HY bond spreads also widened, finishing 2Q'12 at 693 bps, 10.9 percent higher than 625 bps in 1Q'12 but 6.1 percent below the 5-year moving average of 738 bps. The cost of HY borrowing decreased significantly from the beginning of October 2011, when the speculative-grade spread reached 830 bps.

S&P's Global Fixed Income Research reported 14 issuers defaulted worldwide in 2Q'12, 8 of which were based in the U.S. This represents a quarterly decrease in U.S. defaults from 15 in the last quarter, and comparable to the 2Q'11 outcome of 7 U.S. defaults. Despite being one of the top reasons for default, distressed exchanges account for a decreasing share of overall defaults. In 2009, 39 percent of total defaults were due to distressed exchanges and that share has gradually fallen to 20.5 percent in the first half of 2012. The 12-month default rate has increased to 2.6 percent in June from 2.5 percent in March, still well below the long-term average of 4.5 percent. S&P predicts that as the stock market stalls, the number of companies defaulting on their debt will increase and the default rate will rise to 3.6 percent by March 2013.

### S&P US Corporate Rating Actions

	2012:Q2	2012:Q1	2011:Q2	2012YTD	2011YTD
Upgrades	78	77	98	155	179
Downgrades	87	67	57	154	106

Source: S&P Fixed Income Research



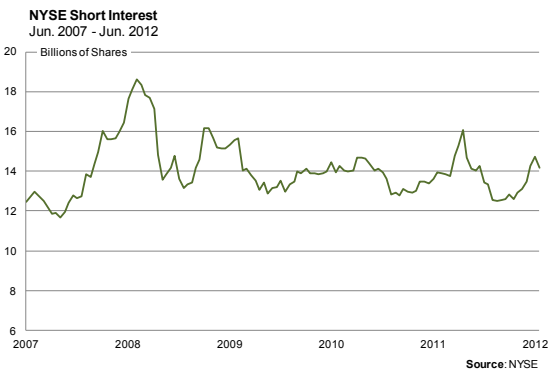
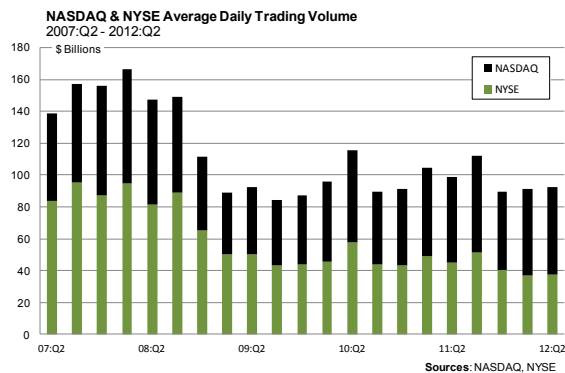
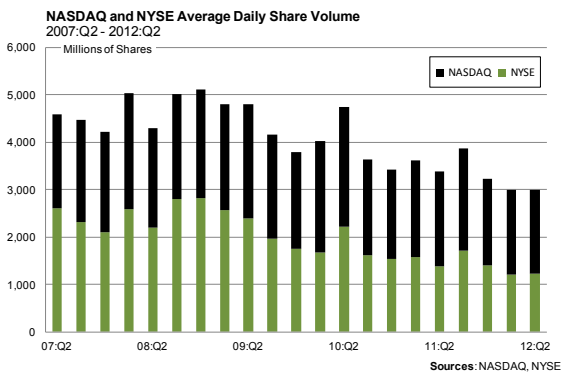
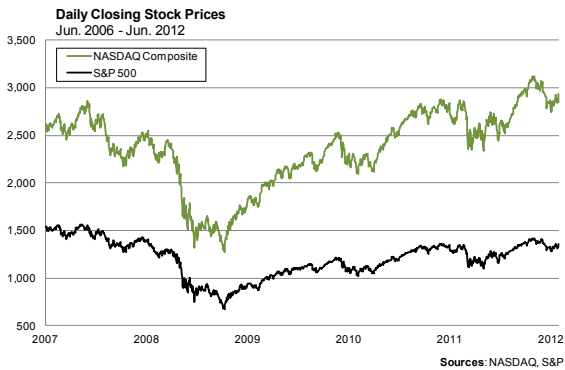
In 2Q'12, S&P Ratings Services downgraded 87 and upgraded 78 U.S. issuers, a slightly weaker outcome than in previous quarter, when there were 67 downgrades versus 78 upgrades. Most of the downgrades this quarter were in the media and entertainment industry, which accounted for 17 of all U.S. downgrades.

### Trading Volume Decreases in 2Q'12

According to FINRA TRACE data, trading volume for IG, HY and convertible bonds (CVs) decreased in the second quarter of 2012 after very high trading activity in 1Q'11. IG average daily trading volume decreased to \$12.3 billion, down 8.1 percent from \$13.4 billion in 1Q'12 but up by 7.6 percent from \$11.5 billion in 2Q'11. HY average daily trading volume declined to \$4.7 billion in 2Q'12, a 14.1 percent decrease from \$5.5 billion in the first quarter but 7.6 percent higher than \$4.4 billion in the same year-earlier period. The average daily trading volume of CV bonds decreased as well. In 2Q'12, CV bonds trading volume stood at \$0.9 billion, 17.0 percent below 1Q'12's \$1.1 billion and 9.7 percent lower than the average trading volume of \$1.0 billion a year ago.

The steep decrease in IG and HY bond trading volume was due to unusually high trading volume in the previous quarter. On a monthly basis, both IG and HY trading volume in the second quarter were above the 12-month averages of \$11.6 billion and \$4.4 billion, respectively. In June, IG bonds trading volume was \$13.8 billion daily, 18.9 percent above the 12-month average, while for HY bonds May saw the highest activity with \$5.2 billion traded daily, 18.5 percent above the 12-month average.

## EQUITY AND OTHER MARKETS



Equity investors recorded slight quarterly losses as U.S. GDP growth slowed to 1.5 percent in 2Q'12 from 2.0 percent in 1Q'12 and worries about the European sovereign debt crisis resurfaced. The S&P 500 closed the second quarter at 1,362.16, a 3.3 percent decrease from last quarter but 3.1 percent up y-o-y. The NASDAQ Composite Index finished the first quarter at 2,935.05, a 5.1 percent decrease from 1Q'12 but a 5.8 percent increase y-o-y. The Dow Jones Industrial Average (DJIA) decreased as well, finishing 2Q'12 at 12,880.04, a 2.5 percent decrease q-o-q but a 3.8 percent increase from 2Q'11. During the quarter, on February 21, DJIA reached the 13,000 mark for the first time since 2008.

### NYSE & NASDAQ Daily Share Volume Almost Unchanged

The New York Stock Exchange's (NYSE) 2Q'12 average daily share volume increased to 1.24 billion shares, 2.8 percent above the previous quarter's 1.20 billion but 10.8 percent below 1.38 billion in 2Q'11, and the second lowest quarterly average daily share volume on NYSE since 1.18 billion shares in 2Q'01 (the lowest quarter volume was \$1.2 billion shares in 1Q'12). The NYSE's average daily dollar volume increased as well. The average dollar volume stood at \$37.4 billion in 2Q'12, 1.3 percent above the previous quarter's \$36.9 billion but a 17.1 percent decrease y-o-y.

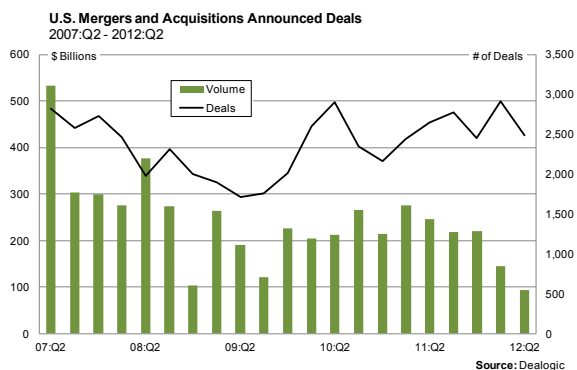
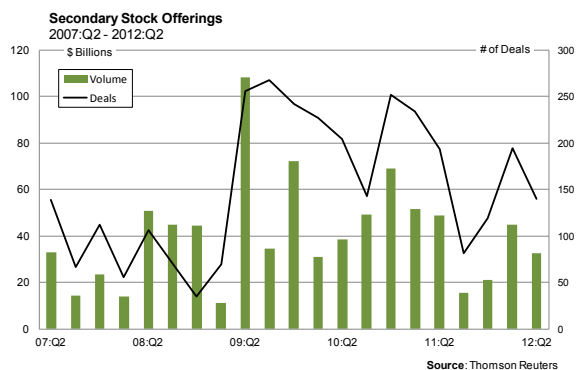
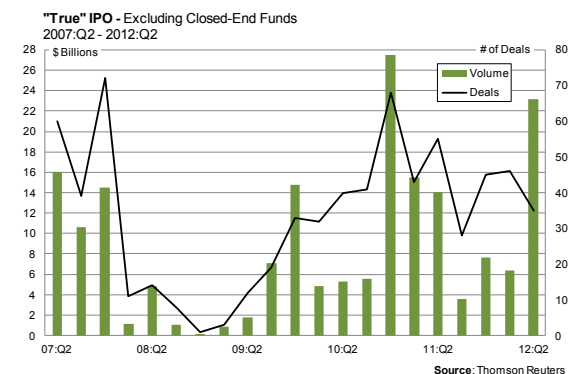
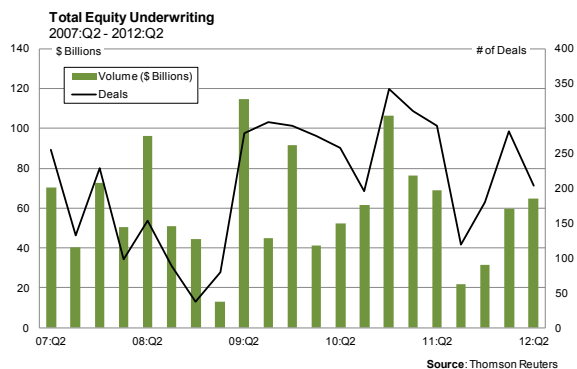
NASDAQ's average daily share volume decreased by 1.6 percent to 1.77 billion shares in 2Q'12 and by 11.4 percent y-o-y. The dollar trading volume increased to \$55.1 billion in 2Q'12, up 1.0 percent from \$54.6 billion in the previous quarter and 3.2 percent above the 2Q'11's \$53.4 billion.

### Short Interest Increases by 12 Percent

The number of shares sold short on the NYSE Group stood at 14.2 billion shares (3.7 percent of total shares outstanding) at the end of 2Q'12, up 12.3 percent from 12.6 billion at the end of previous quarter and 1.7 percent above 13.9 billion at the end of 2Q'11.<sup>12</sup> During the quarter, short interest increased to as high as 14.7 billion shares mid-June, the highest level since the end of September 2011 when short interest was 16.1 billion shares.

<sup>12</sup> NYSE Group [Short Interest Report](#)





## Equity Underwriting Increases

After a big increase in 1Q'12, total equity underwriting volume increased further to end 2Q'12 at \$64.8 billion, up 8.3 q-o-q but 5.9 percent below 2Q'11's \$68.8 billion. The equity underwriting total was also 6.8 percent higher than the 5-year average of \$60.7 billion. Despite the increase in volume, the number of equity underwriting deals decreased to 204 deals, down 27.7 percent q-o-q and down 29.7 percent y-o-y.

## IPO Volume Nearly Quadruples Thanks to Facebook

"True" initial public offerings (IPOs), which exclude closed-end mutual funds, increased in 2Q'12 to \$23.2 billion on 35 deals, a nearly four-fold increase in value from \$6.4 billion but a 23.9 percent decrease from 46 deals in the previous quarter. This large jump in dollar volume was due to the long-anticipated IPO of Facebook. On May 18, 2012 Facebook shares started trading on NASDAQ, raising \$16 billion, the third largest IPO in history, trailing only Visa in March 2008 (\$19.7 billion) and General Motors in November 2010 (\$18.1 billion). According to Dealogic, the leading sector in IPOs in 2Q'12 was computers and electronics, followed by finance and oil and gas sectors. Excluding Facebook, IPO activity remained subdued in the second quarter of 2012 as the economic recovery continued at a weaker than expected pace without strong signs of a turnaround. According to the KCSA Strategic Communications' 2012 IPO Outlook survey, both institutional and individual investors were looking for a respite from market turbulence and a return to predictability.<sup>13</sup>

## Secondary Offerings Decline

Secondary market issuance decreased to \$32.4 billion on 140 deals from \$45.0 billion on 194 deals in 1Q'12 (down 28.0 percent and 27.9 percent, respectively in value and number of issues). The average deal value for the quarter was virtually unchanged at \$231.4 million from \$231.8 million in the previous quarter. Compared to 2Q'11, secondary issuances were down 33.9 percent in dollar volume and 27.5 percent by number of deals.

## Announced M&A Volume Falls by 36 Percent

Investors remained hesitant given the uncertain economic outlook and renewed concerns over the European sovereign debt crisis. Announced U.S. mergers and acquisitions (M&A) volume in 2Q'12 stood at \$92.4 billion, down 36.4 percent from the previous quarter's \$145.2 billion and down 62.5 percent y-o-y. The number of deals decreased by 15.0 percent, declining to 2,483 deals in 2Q'12 from 2,921 deals in 1Q'12, causing the average deal size to fall by 25.1 percent. Announced M&A volume declined to the lowest quarterly level since 1Q'03 and stood 62.8 percent below the 5-year moving average of \$248.5 billion.

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 deals) increased by 73.9 percent to \$52.5 billion from \$30.2 billion in the previous quarter. The dollar amount U.S. companies invested in other countries also rose; American firms invested \$52.3 billion in deals outside of the U.S., 49.3 percent above the \$35.0 billion in 1Q'12.

<sup>13</sup> KCSA [2012 IPO Outlook](#), December 27, 2011.



### P/E Ratio Falls, Remains Below Five-Year Average

The S&P 500's P/E ratio averaged 13.7 in 2Q'12, down 1.8 percent from the previous quarter's average of 13.9 and 12.7 percent below the 5-year average of 15.7. The P/E ratio's q-o-q drop was a reflection of a slower than anticipated economic growth and renewed worries about the European sovereign debt crisis. The S&P 500's P/E ratio decreased by 8.6 percent y-o-y and is 38.2 percent below the quarterly high of 22.1 in 4Q'09.

### Share Buybacks Decrease on NYSE and NASDAQ

The volume of corporate share repurchases on the NYSE totaled \$75.3 billion on 83 deals in 2Q'12, down 24.4 percent and 15.9 percent, respectively, from \$99.5 billion on 104 deals in 1Q'12 and \$89.6 billion on 109 deals in 2Q'11. The average deal size declined by 5.2 percent q-o-q to \$907.2 million in the second quarter. Compared to the second quarter of 2011, NYSE share buybacks decreased by 15.9 percent in volume and by 23.9 percent in number of deals.

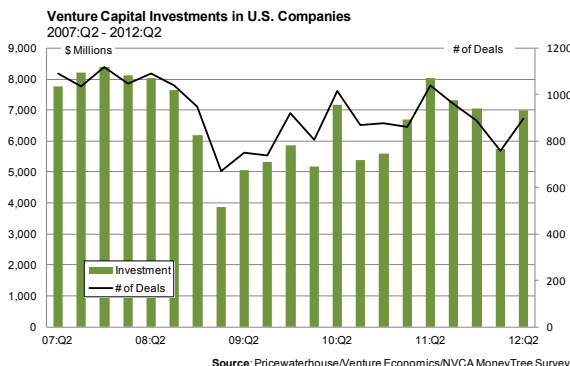
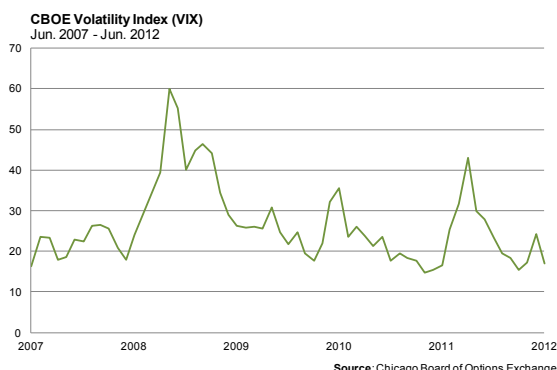
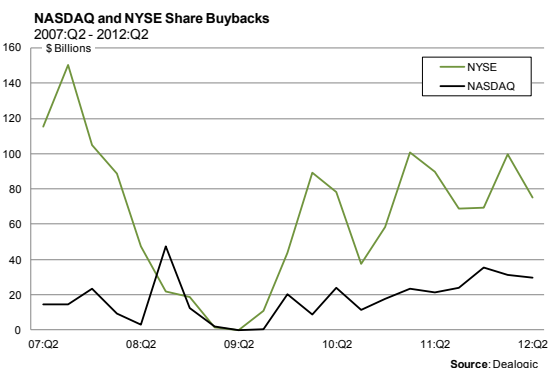
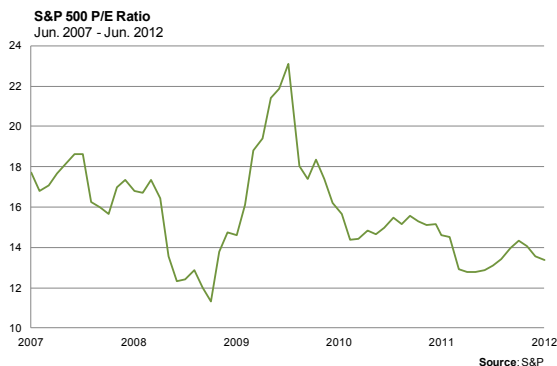
NASDAQ's buybacks stood at \$29.7 billion in 2Q'12, a 4.6 percent decrease from 1Q'12's \$31.1 billion, while the number of deals increased 32.9 percent to 109. The average deal size decreased to \$272.2 million from \$379.3 million in 1Q'12 (down 28.2 percent). Compared to 2Q'11, NASDAQ share repurchases increased by 38.5 percent in volume and by 19.8 percent in number of deals.

### CBOE VIX Index Rises by 10 Percent

The Chicago Board Options Exchange Volatility Index (VIX) increased by 10.2 percent to 17.1 in the second quarter of 2012 from 15.5 in 1Q'12. Despite the increase, the index has been showing a general downward trend since the beginning of October 2011.

### Venture Capital Increased in 2Q'12

Venture capitalists (VC) invested \$7.0 billion in 898 deals in the second quarter of 2012, according to the MoneyTree™ Report from PricewaterhouseCoopers LLP (PwC) and the National Venture Capital Association (NVCA).<sup>14</sup> Quarterly investment activity increased by 16.6 percent in dollar volume and by 11.0 percent in number of deals compared to the second quarter of 2012 when \$6.0 billion was invested in 809 deals. The number of early stage deals reached the highest quarterly total since 1Q'01, with \$2.1 billion on 410 deals. According to the MoneyTree™ Report, the concentration of VC investments in the hands of fewer firms translated into more funding for IT start-ups and less for life sciences and clean technology.<sup>15</sup> The software industry remained the largest investment sector in 2Q'12 with \$2.3 billion in received funding, a 38.0 percent increase from 1Q'12.



<sup>14</sup> PricewaterhouseCoopers. Money Tree Report [Second Quarter 2012 Press Release](#).

<sup>15</sup> Ibid.

# DERIVATIVES

## Interest Rate Swaps

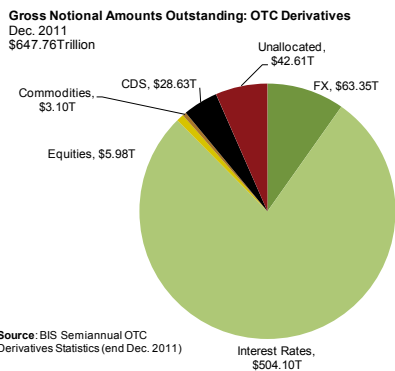
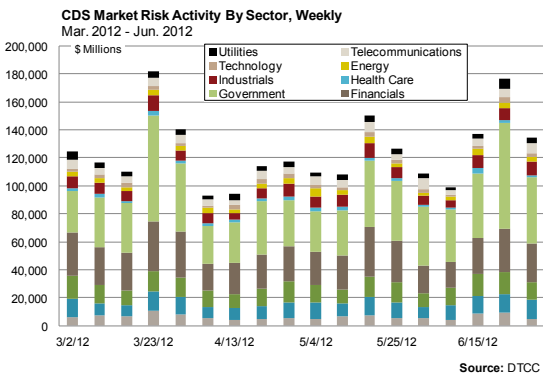
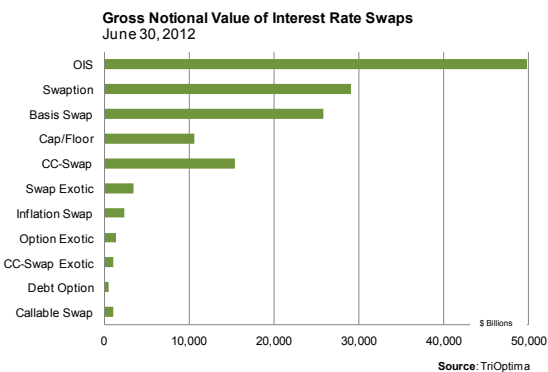
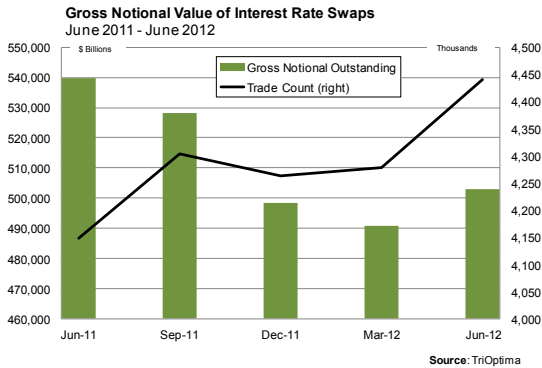
According to DTCC, the gross notional value of outstanding interest rate swaps (IRS) at the end of June 2012 was \$502.2 trillion, up 3.4 percent from end-March's \$486.6 trillion. Decreases in exotic swaps, debt options, swaptions and exotic cross currency swaps were offset by increases in callable swaps, cross currency swaps, and overnight indexed swaps (OIS). The number of contracts outstanding increased q-o-q to 4.4 million (up 5.5 percent), concentrated in callable swaps (up 205 percent q-o-q<sup>16</sup>) and cross credit swaps (up 27.5 percent q-o-q). The largest decreases were found in exotic cross credit swaps (down 60.8 percent q-o-q) and debt options (down 51.7 percent q-o-q).

## Credit Default Swaps

According to DTCC, the gross notional value outstanding of credit default swaps (CDS), including single names, tranches and indices, decreased by 5.9 percent to \$24.99 trillion end-June from \$26.55 trillion end-March and declined 13.6 percent y-o-y. On a net notional basis, CDS outstanding, including single names, tranches, and indices, declined by 9.3 percent to \$2.6 trillion end-June from \$2.9 trillion end-March. Single-name CDS outstanding decreased on a gross notional basis by 5.9 percent q-o-q to \$14.3 trillion, while on a net notional basis, the outstanding value decreased by 3.6 percent q-o-q to \$1.9 trillion.

Activity in the second quarter was concentrated in sovereign and financial reference entities (\$247.0 billion and \$206.9 billion, respectively, on a gross notional basis). The most often referenced entities booked by gross notional exposures were concentrated in European sovereigns, as was the case in 1Q'12, led by Italy (\$321.9 billion), Spain (\$166.8 billion) and France (\$143.8 billion).

Sovereign CDS outstanding increased on a net notional basis q-o-q in many Eurozone sovereigns, including Italy, Germany and France. The overall number of outstanding contracts for sovereign-referenced entities also increased since 1Q'12. Aside from sovereigns and financials, activity decreased in consumer goods to \$107.2 billion and in consumer services to \$99.8 billion (both down 7.0 percent q-o-q).



<sup>16</sup> Beginning May 2012, DTCC took over responsibility for collecting/publishing OTC interest rate trades from TriOptima. As such, sizable increases in certain categories may be the result of different reporting and collecting procedures.

# PRIMARY LOAN MARKET<sup>17</sup>

Primary loan syndication in the U.S. market fell to \$771.5 billion in 1H12, the lowest first half volume since 1H10 (\$531.8 billion), and a 24 percent decrease on 1H11 volume (\$1.02 trillion). U.S. syndication accounted for 52 percent of 1H12 global loan volume (\$1.6 trillion), compared to a 51 percent share during the same 2011 period (\$2.09 trillion)

1,574 loans were syndicated in the U.S. during 1H12, the lowest 1H deal activity since 2010 (1,223 loans), marking a 14 percent decrease from 1H11(1,828 loans). Average deal size in 1H12 was \$490 million, compared to \$557 million during the 1H11 period.

## Regional Breakdown

The Americas accounted for 55 percent of global loan volume in 1H12 with \$877.3 billion borrowed, compared to a 54 percent share (\$1.1 trillion) in 1H11. Asia loan volume of \$352.2 billion accounted for 22 percent of the total, up from the region's 18 percent share (\$370.2 billion) during the same 2011 period. EMEA lending accounted for a 24 percent share of global volume in 1H12, the lowest share for the time period. EMEA 1H12 volume (\$379.5 billion) was the lowest since 1H09 (\$338.5 billion).

All three major regions experienced lending volume decreases in 1H12 compared to 1H11; EMEA led with a 36 percent decrease, followed by the Americas (22 percent decline), and Asia (5 percent decline).

## Use of Proceeds

Refinancing and debt repayment volume together accounted for 42 percent of U.S. syndicated loan volume in 1H12, down from a 53 percent share during the same period in 2011. General corporate purpose loans accounted for 33 percent of U.S. 1H12 loan volume, the highest 1H share since 2009 (40 percent). Spin-off loans made up 2 percent of 1H12 U.S. loan volume, the most since 1H08 (2 percent).

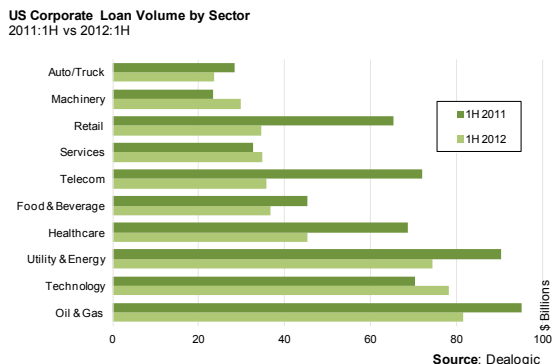
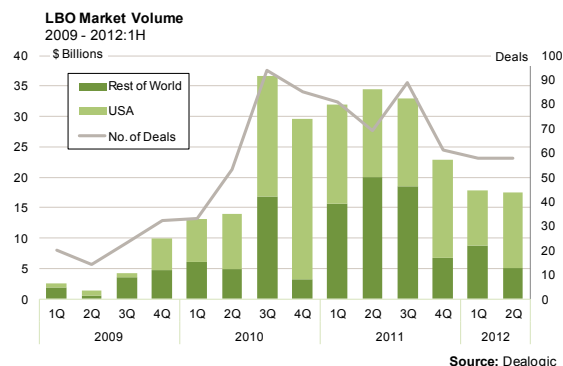
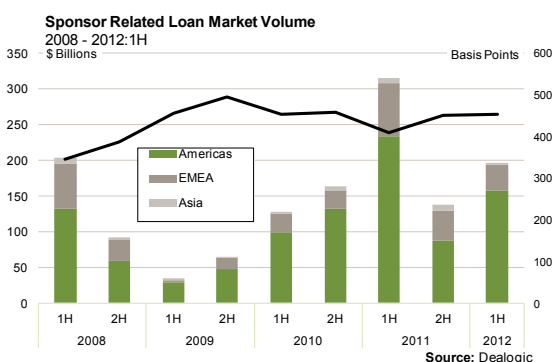
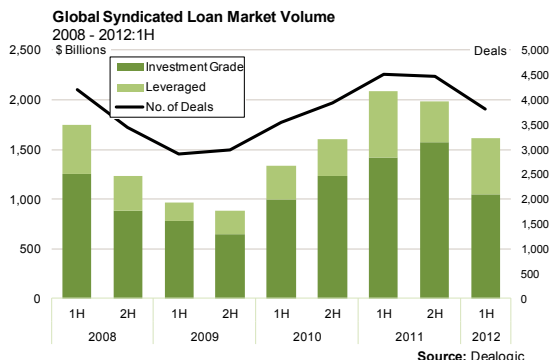
## Deal Types

U.S. investment grade (IG) loans stood at \$406.1 billion in 1H12, down from \$511.6 billion borrowed during 1H11, and accounted for a 53 percent share of 1H primary syndicated volume - the highest 1H share since 2009 (62 percent). Average all-in pricing fell to 182 bps in 1H12, the second consecutive 1H pricing drop since 2010 (242bps). U.S. IG loan tenors averaged 4.2 years in 1H 2012, the highest 1H average IG maturities on record.

U.S. leveraged loan volume fell to \$365.3 billion in 1H12, a 28 percent decrease on the \$506.4 billion borrowed in 1H11. Leveraged all-in pricing increased to an average of 386 bps from 371 bps in 1H11, breaking three straight 1H pricing decreases from 2009 (436 bps). In contrast to IG maturities, U.S. leveraged loan tenors decreased to 4.5 years from 4.7 years in 1H11.

## Corporate Borrowers

Oil & gas led all industries with a 13 percent share of 1H12 syndicated loan volume (\$81.7 billion), the sector's highest 1H proportion since 2008 (14 percent). Technology was the largest 1H increase among the top ten industries, gaining four percentage points to a 12 percent share in 1H12. Telecom lost the largest share, from a 9.8 percent share in 1H11 to a five percent share in 1H12. The top 10 industries accounted for 74 percent of U.S. corporate lending vol-



<sup>17</sup> The author of the Primary Loan Market discussion is Dennis K. Chung, Dealogic. For any questions, please email [Dennis.Chung@dealogic.com](mailto:Dennis.Chung@dealogic.com).

ume in 1H'12, the highest 1H level since 2009 (77 percent).

### **Financial Sponsor & LBO Loan Volume**

U.S. sponsor-related loan volume totaled \$165.2 billion in 1H'12, down 31 percent on the \$239.0 billion completed in 1H'11. U.S. syndication accounted for an 84 percent share of global sponsor-related volume (\$196.8 billion) in 1H'12, the highest 1H share since 1996 (86 percent).

U.S. LBO loan volume in 1H'12 totaled \$21.4 billion, a 31 percent decrease on the \$30.1 billion completed during the same 2011 period, and the lowest 1H volume since 2010 (\$16.1 billion). LBO loan activity, with 70 deals in 1H'12, amounted to the most loan completions since 2008 (106 deals). U.S. syndication accounted for a record 61 percent of 1H global LBO loan volume (\$35.3 billion) in 2012, surpassing the previous 1H record set in 2010 (59 percent).

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