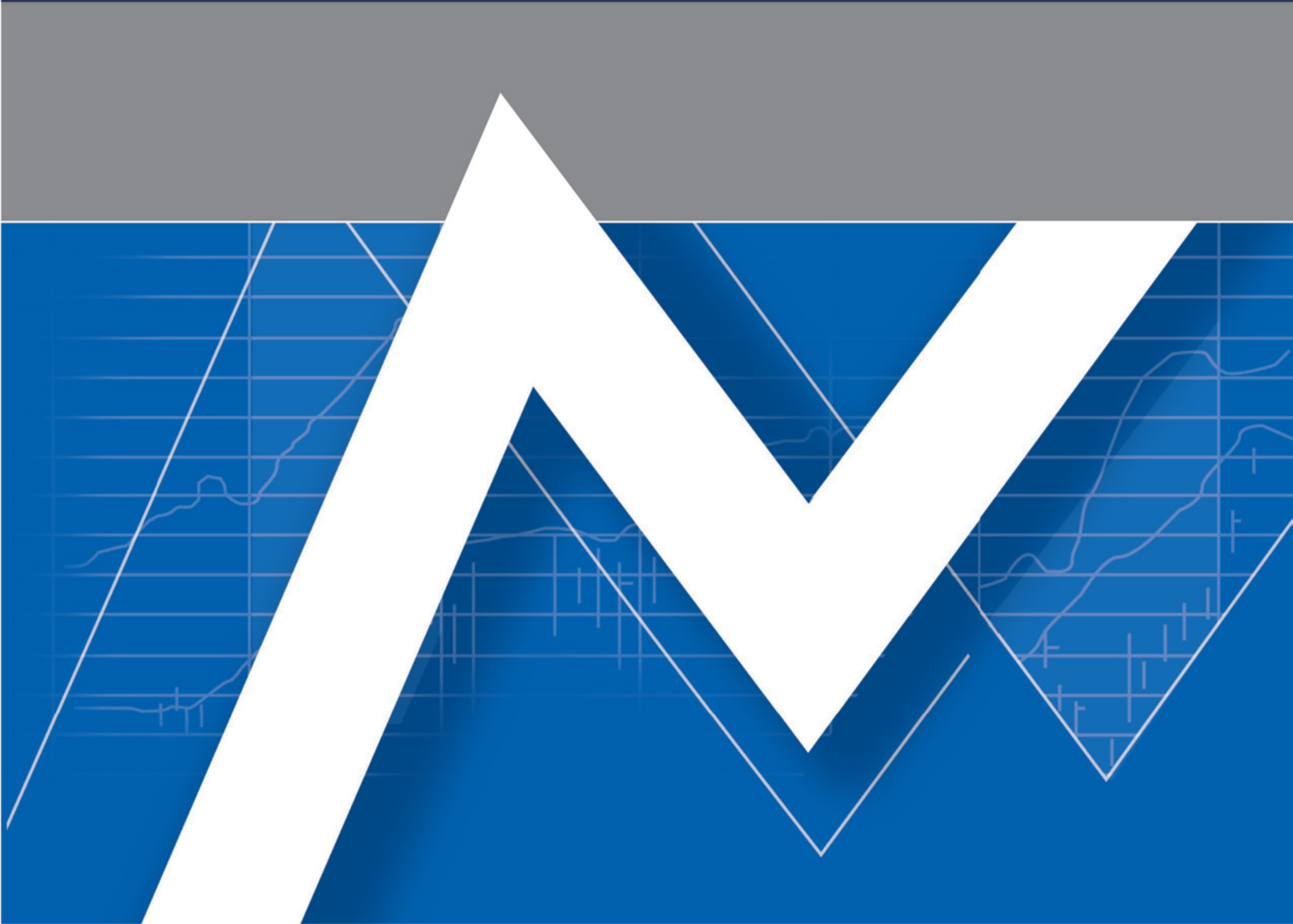
SIFMA®
Securities Industry and Financial Markets Association

RESEARCH REPORT

SEPTEMBER 2008



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SIFMA

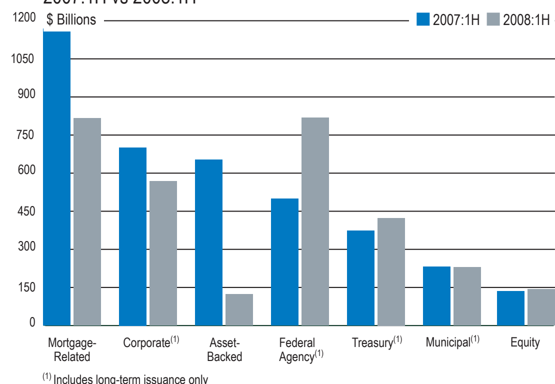
Securities Industry and Financial Markets Association

Capital Market Issuance Reaches $3.12 Trillion, Trails First-Half 2007

Securities issuance in the first half of 2008 reached $3.12 trillion, a modest decrease from the $3.76 trillion issued in the first half of last year. The sharpest declines in new issuance volume were seen in the sectors most vulnerable to the current credit and interest rate environment. Issuance of corporate debt faltered in the first half, a result of a dismal first quarter, but rebounded in the second half. Underwriting in the equity market was behind the first half of 2007, however underwriting activity made a significant recovery in the second quarter as the backlog of offerings began to clear and demand for technology, media and communication stocks increased. Declines in the subprime mortgage and home equity loan sectors led to a significant drop in issuance of asset-backed securities. Similarly, the market for mortgage-backed securities has been significantly influenced by the reduction in activity by private-label issuers. Agency MBS volume has helped to prop up the sector as tighter underwriting standards and the effect of several microeconomic drivers have negatively influenced issuance. Asset-backed securities issuance increased on a quarterly basis, but year-to-date volume still lags far behind the volume of the same period a year ago. Federal agency debt issuance has surged on stagnation in the private-label market. In the first half of 2008, Treasury issuance increased as the federal government sought to meet the expected budget shortfall. Likewise, municipal government's fund-raising in the capital markets is on pace to break last year's record.

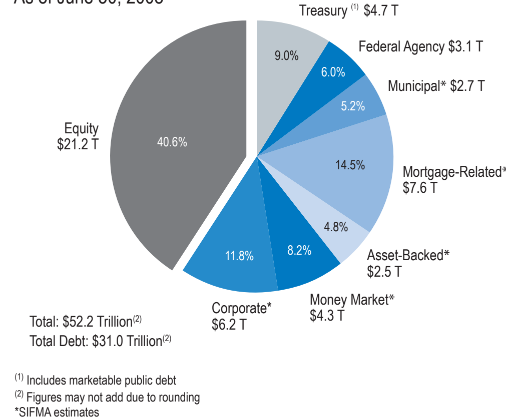
As we progress through the second half of the year, the pace of U.S. economic growth is expected to be subdued, picking up in 2009. The FOMC held the federal funds rate at 2.00 percent at its latest meetings and is not expected to raise the rate until late this year or into next year as the committee looks to balance the risk of inflation with that of a stagnant economy. With the Federal Housing Finance Agency placing Fannie Mae and Freddie Mac into conservatorship, turbulence in the housing market is expected to settle down. With economic growth risk diminishing later in the year and core inflation steady, the economic outlook for the coming year is subdued, but promising. The 10-year Treasury note is expected to yield 4.10 percent, driven by inflation, inflationary expectations, investor risk appetite and Fed policy.

Issuance in the U.S. Capital Markets
2007:1H vs 2008:1H



(1) Includes long-term issuance only

U.S. Capital Markets Outstanding
As of June 30, 2008



(1) Includes marketable public debt
(2) Figures may not add due to rounding
*SIFMA estimates

Issuance Highlights

$ Billions	2008:Q2 only	2007:1H	2008:1H	% Change
Municipal[1]	145.3	231.2	229.1	-0.9%
Treasury[1]	219.8	372.9	423.6	13.6%
Federal Agency[1]	387.9	499.5	817.4	63.6%
Mortgage-Related	429.5	1168.6	816.2	-30.2%
Asset-Backed	65.4	652.3	123.4	-81.1%
Global CDO	17.3	36.8	11.7	-68.2%
Corporate[1]	350.8	701.1	567.7	-19.0%
Equity	96.1	134.5	147.2	9.4%

* Percent change between 2008:1H and 2007:1H
[1] Includes long-term issuance only

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Municipal Volume Matches 2007's Record Pace, ARS Crisis Fuels Refundings

Short- and long-term municipal issuance totaled $250.0 billion in the first half of 2008, essentially unchanged from the $250.9 billion issued in the same period of last year. Total second-quarter issuance increased 82.1 percent on a linked-quarter basis, to $161.7 billion, compared to the $88.8 billion issued in the first quarter, a result of an increase in refunding activity as issuers restructured outstanding auction-rate securities (ARS) into variable rate debt and responded to a tightened credit environment. The first quarter was marked by turmoil in the bond insurance industry and dislocations in the ARS market, both helping to curtail new deals. Issuance in the second quarter received a boost as the conversion to variable-rate debt took hold and previously postponed deals went to market. Improving yields and increased refunding activity have helped keep the year's issuance on pace to meet or surpass the record $429.1 billion issued in 2007.

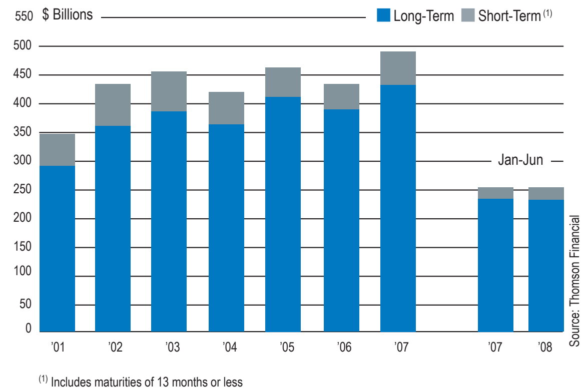
Long-term municipal issuance volume was $145.3 billion in the second quarter, surpassing the record $123.7 billion issued in the same period last year, and the $83.8 billion issued in the first quarter. Record volume in April of $52.5 billion helped to boost issuance totals. New short-term issuance was $16.3 billion, up from $13.4 billion in the second quarter of last year. The ratio of the 10-year AAA-rated general obligation municipal yield to that of Treasury securities of similar maturity ended the second quarter at 101 percent, compared to the historically high 111 percent at the end of March. The increase reflects investor "flight-to-safety" amid the volatile credit market conditions, as well as improved retail demand due to higher, more attractive yields. As of August 19, the yields on 10-year municipal securities have increased to 3.78 percent, with the ratio to comparable maturity Treasuries standing at 99 percent.

New Money Volume Drops; Refundings Surge in Second Quarter

New capital issuance totaled $118.4 billion in the first half of 2008, 9.4 percent less than the $130.8 billion issued in the first half of last year. New capital volume was behind the record 2007, pace as many issues were sidelined by the monoline insurer situation earlier this year. The larger use-of-proceeds sectors saw a decline from the first half of 2007, with education-related issuance totaling $30.4 billion, compared to $36.6 billion. The general government sector issued $30.2 billion, a 12.6 percent decline from the $34.6 billion issued in the first half of 2007. New money volume is expected to strengthen as sidelined deals from the first half of the year are brought to market in the second half, and municipal issuers look to issue debt to meet project financing needs and budget shortfalls.

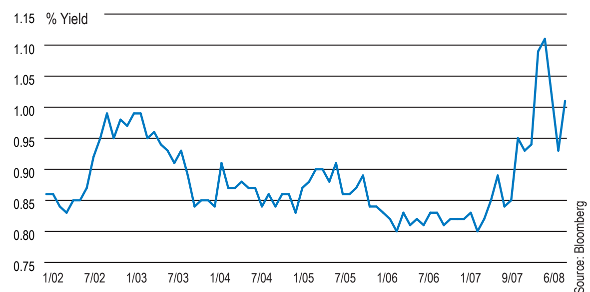
Refunding activity totaled $110.7 billion in the first half, ahead of the $100.3 billion issued in the first half a year ago. Refunding volume increased as municipal issuers sought to restructure outstanding ARS into credit-enhanced variable-rate securities. Issuance volume was down across many of the larger sectors. Education-related issuance fell 9.7 percent, to $23.3 billion from $25.8 billion in the first half of 2007. The general government sector also saw a decline to $17.1 billion in the first half of the year, from $25.1 billion in the same year-earlier period. In contrast, healthcare-related issuance increased to $21.6 billion from $17.0 billion. While the displacement of the ARS market helped to fuel refunding volume, second-half activity will remain constrained until municipal-to-Treasury yield ratios return to their long-term average of below 100 percent.

Short- and Long-Term Municipal Issuance
2001–2008:1H

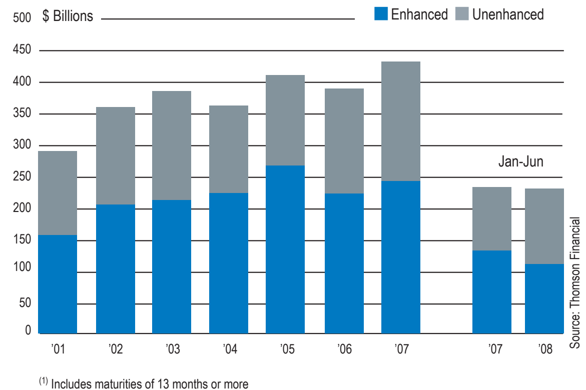


(1) Includes maturities of 13 months or less

Municipal GO AAA and 10-Yr Treasury Ratio
Jan. 2002–Jun. 2008

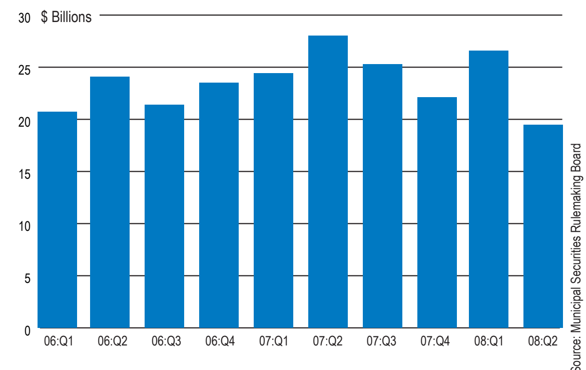


Long-Term[1] Municipal Issuance by Enhancement Status
2001–2008:1H



(1) Includes maturities of 13 months or more

Average Daily Trading Volume of Municipal Securities*
2006:Q1–2008:Q2



* Includes both dealer-to-dealer and customer-to-dealer transactions

Net Treasury Issuance Higher, Yield Curve Steepens as Fed Cuts Rates

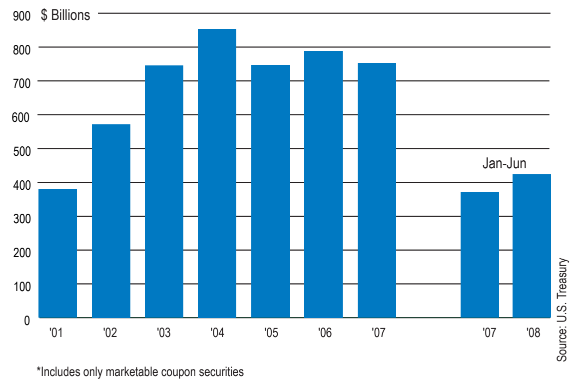
Total net issuance of U.S. Treasury securities, including bills and coupons, was $145.3 billion in the first half of 2008, up significantly from the net paydown of $12.8 billion in the first half of 2007, a result of a rising budget deficit projection. Net coupon issuance was $88.8 billion in the first half, up 42.5 percent from the $62.3 billion issued in the first half a year ago.[1] Consistent with the results of SIFMA's recent Government Forecast Survey, the U.S. Treasury announced that it expects to borrow $171 billion of marketable debt in the third quarter of calendar year 2008, compared to a net issuance of $105.3 billion a year ago. In July, the White House Office of Management and Budget announced an expected federal budget deficit of $389 billion for fiscal year (FY) 2008, compared to the $162 billion budget deficit in FY 2007. The higher deficit projection reflects a forecast of below-trend economic growth along with higher inflation. The Congressional Budget Office estimates that the government will have incurred a budget deficit of $268 billion in the first nine months of the current fiscal year, compared to approximately $148 billion in the same period of FY 2007. The introduction of the 52-week bill by the U.S. Treasury in the second quarter has helped reduce reliance on large cash management bills and provide for sufficient financing to absorb the government's additional borrowing requirements.

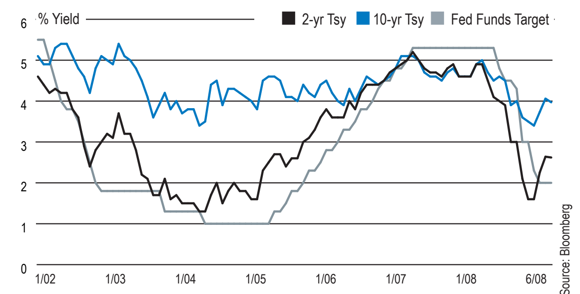
Gross coupon issuance volume increased 13.6 percent during the first half of 2008, to $423.6 billion, up from $372.9 billion in the same period of 2007. Gross bill issuance was $2.14 trillion, higher than the $1.79 trillion issued in the first half of 2007. Gross issuance is affected by expected refunding of maturing and callable debt as well as Treasury's new cash needs. Total marketable Treasury debt outstanding reached $4.68 trillion as of June 30, 2008, virtually flat compared to the end of the previous quarter. Daily trading volume of Treasury securities by primary dealers averaged $622.0 billion in the first half, compared to $534.8 billion during the same period a year ago.

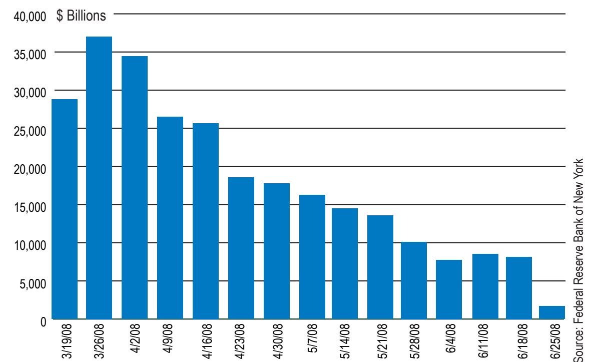
In addition to the series of rate cuts that began in September 2007 and lowered the Fed Funds target rate to 2.00 percent from 5.25 percent, the Federal Reserve has acted to add liquidity to the credit markets through the formation of the Term Auction Facility (TAF), which channels funds to qualified banks needing assistance in meeting funding requirements, as well as the Treasury Security Lending Facility (TSLF) and Primary Dealer Credit Facility (PDCF), which provides funding to primary dealers in exchange for a specified range of collateral.

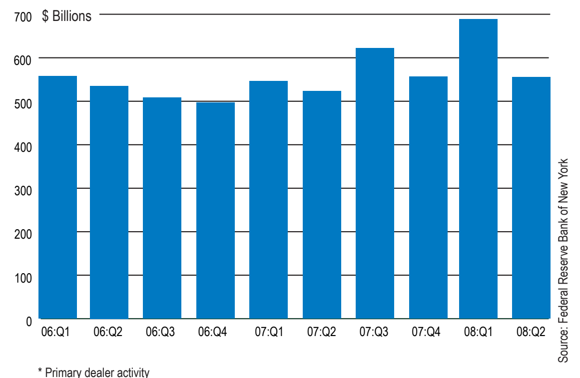
Treasury securities' prices continued their rally as credit market dislocations and anticipated rate cuts drove the yield curve flatter. Yields across the maturity spectrum remained at relatively low levels as investors continue to seek the safety and quality of the Treasury market. The 2-year Treasury yield rose to 2.62 percent at the end of June, higher than the 1.58 percent recorded at the end of March, but well below the 4.86 percent recorded at the end of June 2007. The 10-year Treasury yield followed a similar pattern, rising to 3.97 percent at the end of June 2008 from 3.41 percent at the end of March, compared to 4.86 percent at the end of June a year ago. The 2-year to 10-year yield spread tightened to 135 basis points at the end of June, from 183 basis points at the end of the March. The 2- and 10-year yields stand at 2.30 and 3.83, respectively, as of August 19. The fragility of the economy and lower crude oil prices have resulted in a pause in the rate hikes by the FOMC. As concerns about inflation have lessened for now, the FOMC has elected to hold the benchmark rate at 2.00 percent. Stability in the financial sector and a rebound in the housing market are both top issues for the Fed.

[1] The most recent SIFMA Government Forecast can be found at: www.sifma.org/research/pdf/GovForecast0708.pdf









Agency Issuance Flourishes in Tight Credit Environment

Issuance of federal agency long-term debt totaled $817.6 billion in the first half of 2008, 63.7 percent higher than the $499.4 billion issued in the same period of last year. Second-quarter issuance reached $387.9 billion, down from the $429.5 billion issued in the first quarter, but higher than the $234.1 billion issued in the second quarter of 2007. Monthly Government Sponsored Enterprises (GSEs) issuance peaked in February at $158.6 billion, beginning the second quarter with $157.1 billion in new volume, and closing June with $124.0 billion. The issuance growth at each of the five agencies reflects continued stagnation in the private-label market for mortgage-backed securities. As concerns about the larger agencies' solvency and ability to raise funds in the capital markets rose, the Treasury and Federal Reserve implemented measures to prevent a failure of a GSE to reassure the investment community. In early September, the Federal Housing Finance Agency placed Fannie Mae and Freddie Mac into conservatorship and assumed the power of the Board of Directors and management. The takeover enables the Treasury to acquire $1 billion or preferred shares in each company. The Department has also pledged to provide as much as $200 billion in assistance to the companies toward the heavy losses on their mortgage defaults.

The Federal Home Loan Banks (FHLB) has acted as an important and lower-cost source of liquidity during the prolonged credit crisis for lending and depository institutions. FHLB issuance surged to $384.1 billion in the first half, a result of strong first quarter issuance. Second-quarter issuance fell to $169.6 billion, down from $214.5 billion in the first quarter, possibly reflecting improvement in the credit market. Accounting for nearly half of total agency debt issuance, the FHLB is expected to continue its strong pace of growth with assistance from the Treasury until the credit markets recover.

Freddie Mac's debt issuance increased 56.3 percent, to $195.0 billion, in the first half of the year, compared to $124.7 billion in the same period of 2007, while Fannie Mae's debt issuance increased to $171.9 billion from $113.7 billion. Long-term issuance by the Farm Credit System increased to $64.5 billion in the first half, following issuance of $25.6 billion in the same period last year. The Tennessee Valley Authority's issuance of long-term debt was $2.1 billion in the first half, compared to $26.5 million in the same period of 2007.

Two-year agency spreads to comparable Treasuries rose to 28 basis points at the end of June from 18 basis points at the end of March. On the longer end, spreads between 10-year agency coupons to Treasury coupons of comparable maturity widened to 19 basis points on June 30, compared to 13 basis points on March 31. The wider spreads reflect global credit market conditions and investor "flight to safety." The 10-year agency-to-Treasury spread stood at 94 basis points as of August 19.

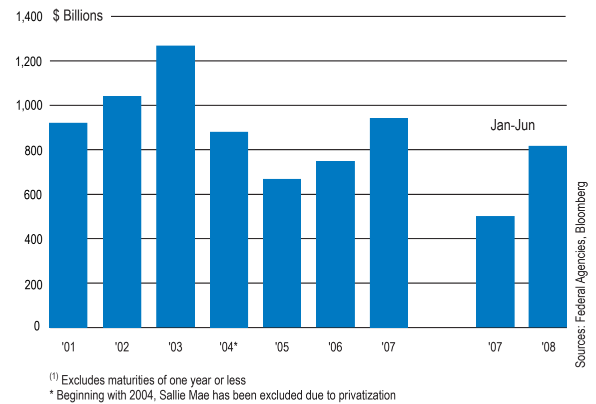
Long-Term Federal Agency Debt Issuance

$ Billions	2007	2007:1H	2008:1H	% Change*	$ Change*
FHLB[1]	495.2	235.4	384.1	63.2%	148.7
Freddie Mac	191.1	124.7	195.0	56.4%	70.3
Fannie Mae	190.8	113.7	171.9	51.2%	58.2
FCS[2]	64.6	25.6	64.5	152.0%	38.9
TVA[3]	1.1	0.03	2.1	11064.3%	2.1
Totals	942.8	499.4	817.6	63.7%	318.2

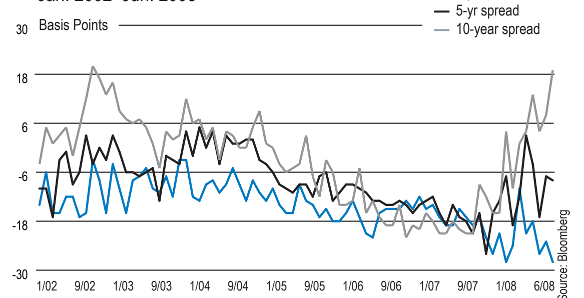
Sources: Bloomberg and Federal Agencies

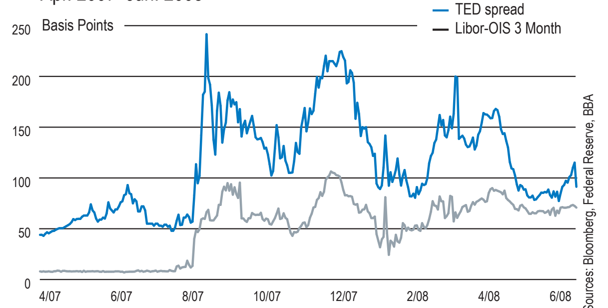
*Percent and amount change between 2007:1H and 2008:1H

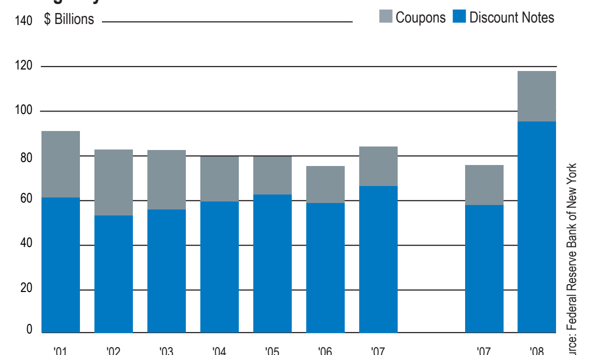
[1] Federal Home Loan Bank System
[2] Farm Credit System
[3] Tennessee Valley Authority



(1) Excludes maturities of one year or less
* Beginning with 2004, Sallie Mae has been excluded due to privatization







(1) Primary dealer activity

Agency MBS Issuance Strong; Housing Bill Expected to Add Stability to Markets

Issuance of mortgage-related securities, including agency and non-agency pass-throughs and collateralized mortgage obligations (CMO), totaled $816.2 billion in the first half of 2008, compared to $1,168.9 billion in the first half of last year. The drop in year-over-year volume can be attributed to the dissolution of the private-label market and tighter mortgage underwriting standards. Issuance of mortgage-related securities reached $429.5 billion in the second quarter, ahead of the $386.7 billion issued in the first quarter, but well below the $628.5 billion issued in the second quarter of 2007.

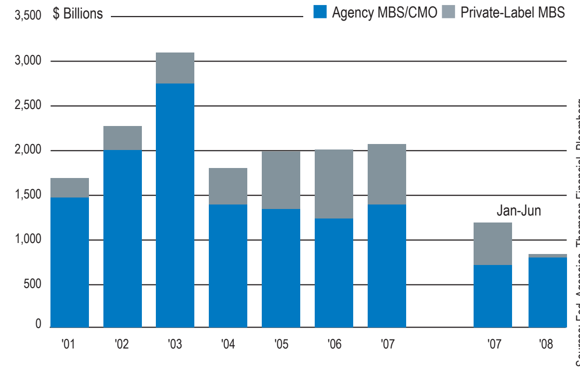
The market for mortgage-related securities has proven to be vulnerable to several microeconomic factors, driving the decline in issuance volume. Rising delinquencies and foreclosures, continued declines in home prices and tighter underwriting standards by mortgage lenders, combined with tightened liquidity and overall turbulence in the global credit markets has prompted the recent passing of the housing bill by Congress designed to add stability and confidence in the markets. More mortgage financing could become available as several large banks have committed to issuing covered bonds, on-balance sheet instruments that are backed by a pool of high-quality mortgages that must meet certain criteria. In addition to supporting the issuance of covered bonds, the U.S. Treasury has announced a plan that would overhaul supervision of the housing-related GSEs and allow the government to insure refinanced mortgages. Recognizing the important role GSEs play in the stability and credibility of the housing market, and overall global financial markets, the Federal Housing Finance Agency and Treasury intervened and has taken the two housing GSEs under conservatorship in a move to stabilize and return investor confidence to the MBS market. Treasury's support of GSE debt reinforces its status and strengthens the implicit guarantee on the Agencies' outstanding debt.

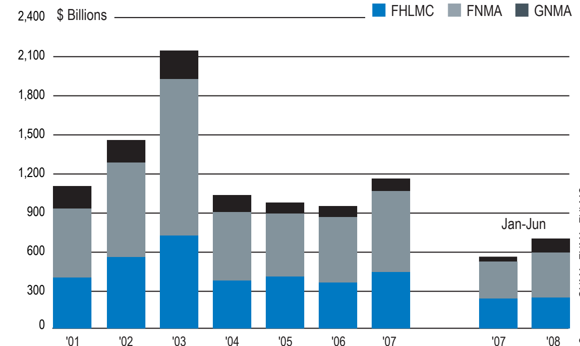
Agency Issuance Compensates for Private-Label Decline

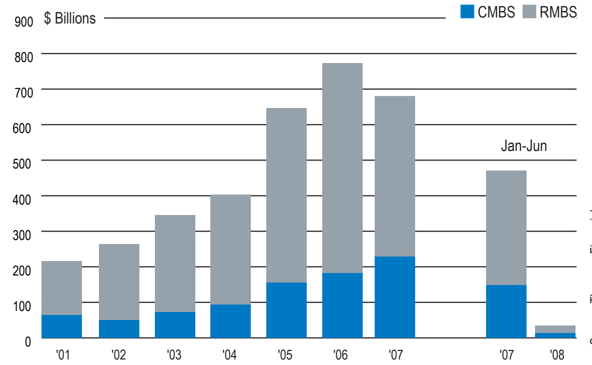
Issuance of agency mortgage-backed pass-throughs totaled $687.5 billion in the first half of 2008, an increase of 25.2 percent from the same period last year. Agency CMO issuance decreased to $93.5 billion in the first six months, a decline of 37.5 percent compared to the $149.8 billion issued a year earlier. The higher agency issuance levels reflect the interest rate spread between agency and non-agency securities and the expanded capacity of the GSEs under the recently passed housing bill. Agency issuance accounted for roughly 96 percent of total residential mortgage-related security issuance in the first half of 2008.

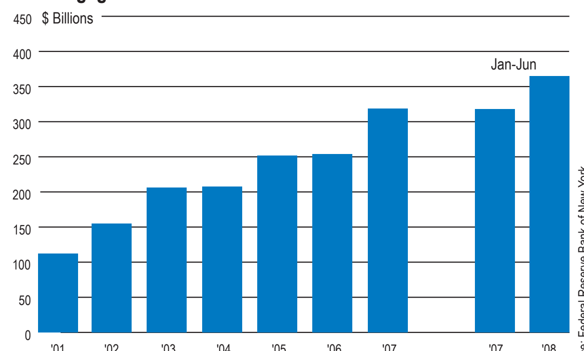
The private-label market turmoil has engulfed higher-quality as well as subprime product sectors. Private-label issuance includes both jumbo mortgages that exceed conforming loan size limits and higher-credit-risk mortgages that do not meet underwriting guidelines. Non-agency residential mortgage-backed securities (RMBS) new issue volume decreased to $22.0 billion in the first half, a fraction of the $322.1 billion issued in the same period of last year. RMBS issuance totaled $10.1 billion, in the second quarter, compared to $11.9 billion in the first quarter and $155.4 billion in the second quarter of 2007.

Commercial mortgage-backed securities (CMBS) issuance totaled $13.2 billion in the first six months of 2008, down dramatically from the $149.0 billion issued in the same period a year ago. Approximately $6.6 billion in new CMBS was issued in the second quarter, flat compared to the first quarter, but well below the $91.5 billion issued in the second quarter of 2007. The CMBS sector has suffered from tighter financing conditions and weakened economic growth resulting from slowed real estate activity and constrained retail sales.









Total ABS Issuance Rises; Home Equity ABS Issuance Continues to Head Lower, But Credit Cards and Student Loans Rise

Asset-backed securities (ABS) issuance increased to $66.0 billion in the second quarter, up 13.7 percent from the historically low previous quarter's volume of $58.0 billion and 80.2 percent less than second quarter 2007 volume of $333.0 billion. Total issuance for the first half of 2008 was $124.0 billion, significantly below the $657.4 billion issued in the first half of 2007. The reduced volume is largely due to declines in the subprime mortgage and home equity loan (HEL) sectors. The ABS market faces two major challenges from oil price rises and bank writedowns: with oil prices relatively high, gas prices will weaken consumer credit performance as discretionary income is squeezed; in addition, while bank writedowns now total over $400 billion, with $300 billion in capital raised, this process can still be considered to be in the early stages. Both factors will, in turn, slow economic growth and soften the labor market; while these issues have been recognized by the market, the likelihood exists that higher commodity prices, additional writedowns and more expensive capital will trickle down in the ABS markets, triggering another bout of selling.

Leading ABS Sectors

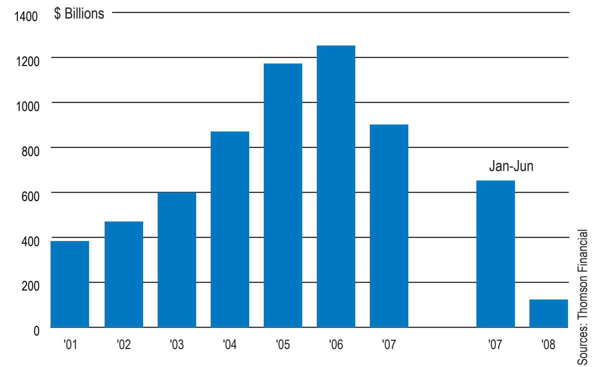
Auto loan ABS was the largest issuing ABS sector, with a second-quarter issuance of $21.0 billion, a 132.8 percent increase from the previous quarter, but a 15.9 percent decrease from the second quarter of 2007. According to industry experts, auto lease ABS deals were placed on negative watch by S&P, citing softer consumer demand for trucks, sport-utility and crossover-utility vehicles as well as the subsequent "unprecedented and rapid" decline in used vehicle prices.

Credit card ABS was the second-largest issuing sector in the second quarter, at $19.2 billion, a decrease of 29.7 percent from the previous quarter and 19.4 percent below second-quarter 2007. Delinquency rates have remained relatively flat due to more aggressive collection efforts. Moody's and S&P placed the ratings of all Washington Mutual Master Trust and Washington Mutual Master Note Trust classes on negative watch, citing the elevated charge-off rates.

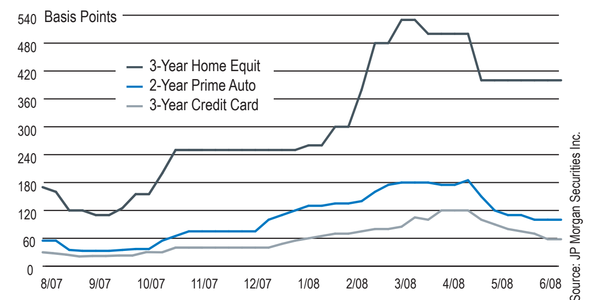
Student loan ABS issuance increased to $14.4 billion in the second quarter, a 76.1 percent increase over the previous quarter's $8.2 billion and a 35.4 increase over second-quarter 2007 issuance of $10.6 billion.

The HEL ABS and mortgage ABS primary markets virtually closed down in the second quarter. HEL ABS issuance volume was only $0.6 billion, an 80.4 percent decrease from the previous quarter and a stark contrast to the $87.5 billion in issuance during the second quarter of 2007. Similarly, mortgage ABS, including non-jumbo transactions comprising first-lien mortgage loans with weighted average FICO credit scores of less than 674 and subprime mortgages, remained at $0.12 billion in the second quarter, up marginally by 5.4 percent from the first quarter, when only $0.11 billion was issued. Non-agency mortgage-related sectors will continue to suffer from low issuance volumes.

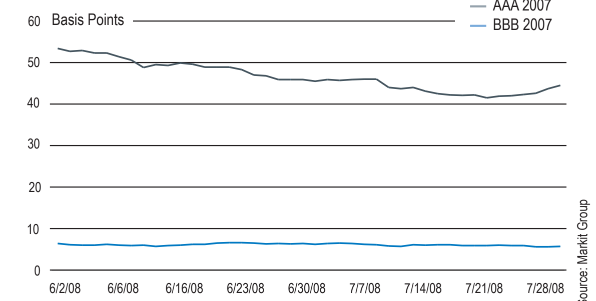
Issuance of Asset-Backed Securities
2001–2008:1H



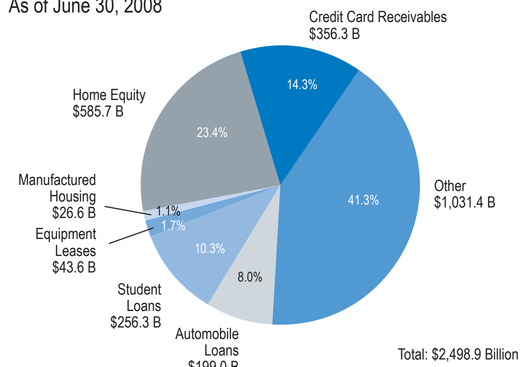
Asset Backed Swap Spreads
Aug. 2007-Jun. 2008



ABX.HE Credit Spreads
Jun. 2008–Jul. 2008



ABS Outstanding by Major Types of Credit*
As of June 30, 2008



*Percentages may not add due to rounding.

Global CDO Issuance Drops on Weak Liquidity, Subprime Deterioration

Global collateralized debt obligation (CDO) issuance fell for the fifth consecutive quarter as diminished liquidity, de-leveraging, subprime mortgage deterioration and valuation uncertainties continued. Global funded CDO volume fell to $17.3 billion in the second quarter of 2008, compared to $19.5 billion in the previous quarter and $175.9 billion in the second quarter of 2007. For the first half of 2008, $36.8 billion was issued, a significant drop from the $362.4 billion issued in the first half of 2007. Cash flow and hybrid CDO volume totaled $14.3 billion in the second quarter, an increase of 19.5 percent from the first-quarter issuance of $11.9 billion, but a decrease of 89.4 percent from the same period a year ago. The synthetic funded CDO primary market continued to be virtually closed, with only $0.7 billion issued second-quarter 2008, compared to $8.4 billion in the previous quarter. Market-value CDO volume declined to $2.4 billion in the second quarter of 2008, down from $7.0 billion in the previous quarter. Based on CDO purpose segmentation, arbitrage CDOs represented 62 percent of global volume during the second quarter of 2008, despite declining by 40.7 percent from the previous quarter and dropping 93 percent below the $153.6 billion issued in the second quarter a year ago.

Collateral and Currency Sectors

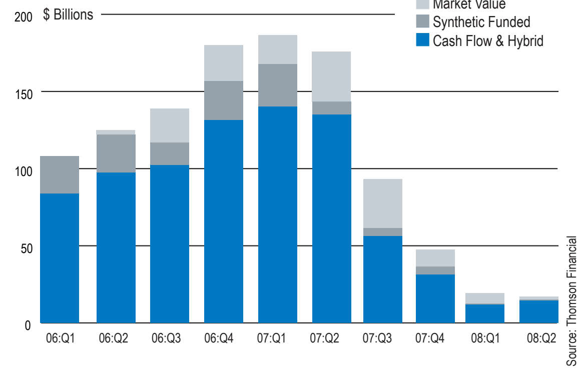
Although the structured finance (SF) collateral group encompasses a wide range of collateral types, the group is dominated by mortgage-related (largely subprime) and home equity loan collateral. Credit quality deterioration, diminished liquidity and weak housing market trends have brought SF CDO issuance to a virtual halt in 2008, with $5.0 billion issued in the second quarter following $6.0 billion in the first quarter, compared to the $98.7 billion in the second quarter a year ago. CDOs backed by high-yield loans, or collateralized loan obligations (CLO), were the highest-collateral CDO issuance sector in the second quarter, at $11.3 billion, an 85.1 percent increase over the previous quarter.

In 2007, the dollar-denominated segment of CDO issuance accounted for more than 50 percent of global issuance, but by the second quarter of 2008 the euro-denominated segment dominated at 48.5 percent, a 20.8 percent increase from the previous quarter, to $9.8 billion, though nowhere near the levels from the second quarter of 2007, when $32.5 billion was issued. U.S. CDO volume ranked second, at $6.2 billion, down 29.7 percent from the previous quarter.

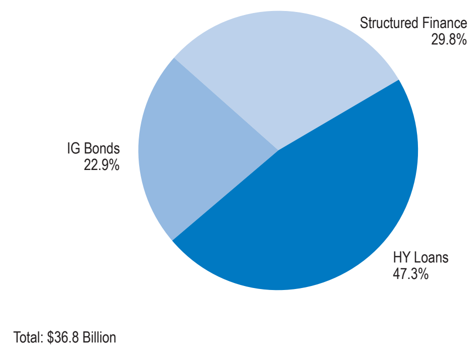
Downgrades Continue

Following the downgrades of Ambac, MBIA, CIFG, FGIC, TCPL and XL Capital Assurance, CDO rating downgrades dominated the landscape, and most of the downgrades were ABS or SF CDOs. As of July 10, year-to-date, there were 1,224 rating actions taken on various ABS RMBS and CDOs affecting $276 billion, according to Moody's. On the SF CDOs side, S&P has reported 202 SF CDOs experiencing events of defaults totaling over $220 billion as of June 30. Nearly one quarter of the entire Events of Default (EOD) asset pool have fallen into liquidation.

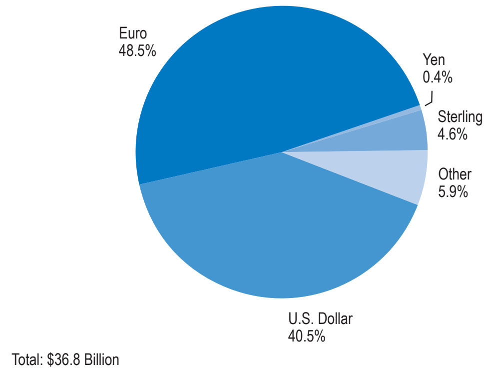
Global CDO Issuance by Transaction Structure
2006:Q1–2008:Q2



Global CDO Issuance by Underlying Collateral
2008:1H



Global CDO Issuance by Currency
2008:1H



Repo Average Daily Amount Outstanding Increases in the First Quarter

The average daily volume of total outstanding repurchase (repo) and reverse repo agreement contracts was $7.11 trillion in the second quarter, a 9.7 percent increase from the $6.38 trillion average in the previous quarter. Daily outstanding reverse repo agreements averaged $2.79 trillion, 1.2 percent above the previous quarter's $2.76 trillion. Average outstanding repo decreased by 2.11 percent, totaling $4.21 trillion in the second quarter, compared to $4.31 trillion the quarter before. The data represent financing activities of primary dealers reporting to the Federal Reserve Bank of New York, which includes repurchase and reverse repurchase agreements involving U.S. government, federal agency, agency mortgage-backed, and corporate securities.

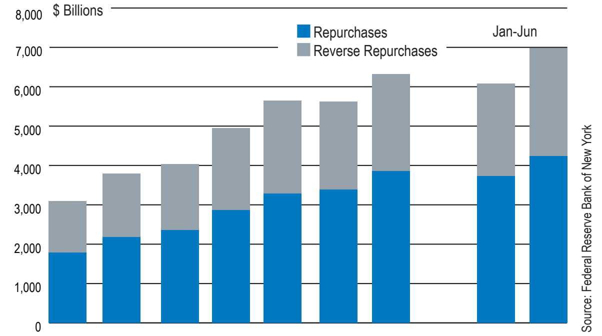
The Fixed Income Clearing Corporation's Government Securities Division (GSD), an SEC-registered clearing agency, facilitates orderly settlements in the U.S. Government securities market and tracks repo trades settled through its system by product type. Over $281.4 trillion in repo trades were submitted by GSD participants through the second quarter of 2008, with an average daily volume of approximately $2.3 trillion. Transactions involving Treasury notes accounted for the largest share of GSD's repo activity, representing $191.4 trillion, or 68.0 percent of total volume. Repos involving Treasury bills accounted for an estimated $19.0 trillion, or 6.8 percent of the total, and those involving Treasury bonds accounted for $20.4 trillion of the activity for the period. Transactions involving federal agency non-mortgage securities accounted for $24.9 trillion, or 8.8 percent of 2008's volume through the second quarter.

CP Outstanding Declines in the Second Quarter; Money Market Outstanding Rises

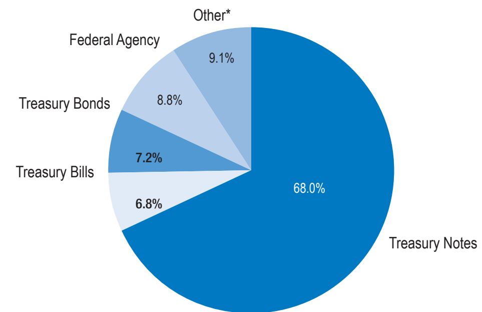
The outstanding volume of total money market instruments, inclusive of commercial paper (CP) and large time deposits, totaled more than $4.25 trillion at the end of June 2008, a slight increase from the $4.20 trillion outstanding at the end of March. CP outstanding totaled $1.74 trillion at the end of June 2008, a modest 2 percent decrease from the $1.78 trillion at the end of March 2008.

Financial CP outstanding decreased 2.1 percent to $817.6 billion, from the $835.3 billion total at the end of the first quarter. Non-financial CP outstanding declined to $165.1 billion at the end of June, down 4.91 percent from the previous quarter end total of $173.6 billion and down 8.8 percent from the $181.1 billion total at the end of May. Weak economic growth has slowed investment spending and thus the demand for more traditional commercial paper has stabilized. Asset-backed commercial paper (ABCP) outstanding declined by 6.7 percent, to $758.2 billion, from the $812.5 billion accumulated at the end of March, due in part to a slower mortgage sector, the presence of more assets on company balance sheets, and slower financial company growth.

Financing by U.S. Government Securities Dealers
Average Daily Amount Outstanding 2001–2008:1H



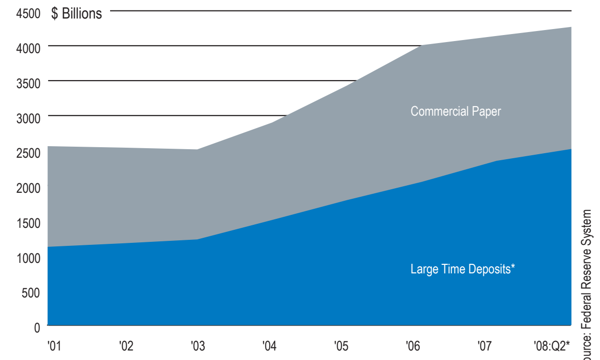
Repo Trades Submitted to the GSD
2008:1H



Total: $281.4 Trillion

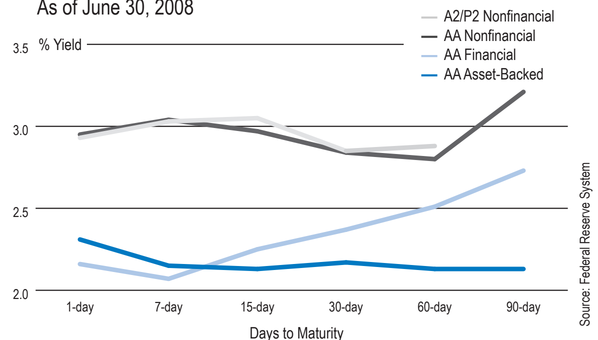
* Includes Discount Agency, Forward Starting Generic Repo Trades, STRIPs, TIPS Bonds, TIPS Notes

Outstanding Money Market Instruments
2001–2008:1H*



* SIFMA estimates

Commercial Paper Discount Rates - Yield Curves
As of June 30, 2008



Corporate Bond Issuance Recovers from Feeble First Quarter Start

After a feeble start in the first quarter of this year, corporate bond issuance staged an impressive recovery. The uncertainty in credit markets, increased volatility, reduced profit trend, and widening corporate bond spreads are among the main reasons for an anemic first quarter, but they failed to hinder corporate bond issuance in the second quarter. Total corporate bond issuance rose to $331.4 billion in the second quarter of 2008, reflecting a 57.5 percent increase from the previous quarter and was only 4.6 percent below the very strong results in the same year-earlier period. Despite the dramatic volume increase from the first quarter, it remains unlikely to continue and issuance levels are expected to moderate. The support provided by the Federal Reserve's liquidity actions has inspired an increase in investor risk appetite for corporate bonds. In regard to corporate spreads, the stunning spread widening in the first quarter, notably in the financial sector, has been alleviated somewhat as financial institutions have undertaken significant recapitalization programs.

The first half of 2008 witnessed dismal issuance totals in the high-yield sector, the lowest since the first half of 2000. According to S&P Global Fixed Income Research, high-yield issuance will most likely continue on this path because of stricter lending standards and the reduced likelihood of underwriters taking on higher risk.

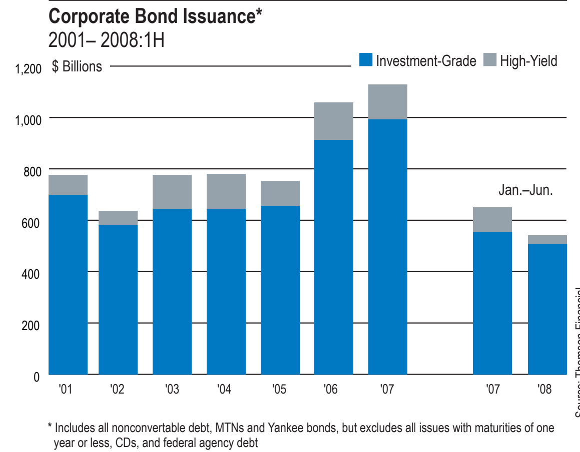
Credit Quality Stagnant at Weak Levels; Spreads Shrink in Second Quarter

Corporate credit quality has been declining in aggregate over the past year and credit quality is expected to remain relatively poor in the second half of the year. The amount and pace of downgrades was elevated in the first half of the year, and is expected to continue through the remainder of the year. Volatility within the credit markets contributes to the overall increase in downgrades. S&P's downgrade/upgrade ratio is at 1.32 percent, more than double the rate of a year ago. Consumer-dependent sectors such as the retail, entertainment and auto industries are considered most vulnerable to downturns in inflation-rattled consumer spending.

Default rates have continued to rise from historically low rates through the first half of 2008. According to S&P's Global Fixed Income Research, the 20 companies that accounted for the entire global default total were all quartered in the U.S., of which twelve were publicly rated and eight were confidentially rated. As of the end of June 2008, the S&P speculative grade default rate for the U.S. was 1.92 percent, a substantial increase from the 0.97 percent default rate posted at the end of 2007. The S&P baseline forecast for a 4.7 percent default rate a year from now remains unchanged.

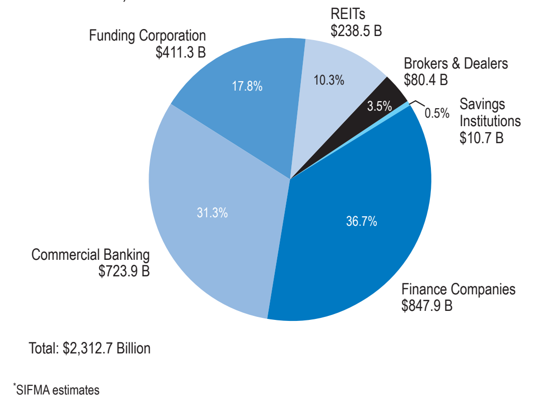
According to a JPMorgan Credit Quality report, corporate spreads remain under duress due to lower earnings forecasts and higher commodity prices. Corporate spreads continued to widen in the second quarter and through July. As of June 30, the JP Morgan JULI Investment-Grade Index spread was 251 basis points (bps) over Treasuries. The Merrill Lynch High-Yield Index spread tightened 86 bps, to 735 bps at the end of June, from 821 bps at the end of March. The credit derivative swap market followed a similar pattern; the CDX.NA.HY spreads tightened to 670 basis points, down 14 bps from the end of March.

Corporate Bond Issuance*
2001– 2008:1H



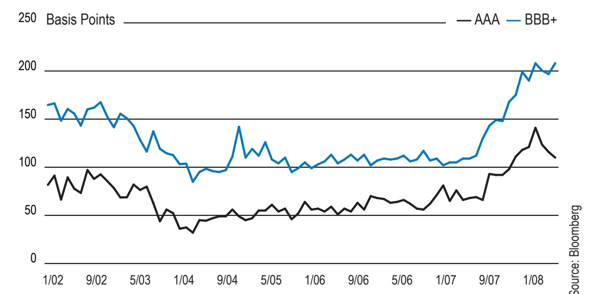
* Includes all nonconvertable debt, MTNs and Yankee bonds, but excludes all issues with maturities of one year or less, CDs, and federal agency debt

Corporate Debt Outstanding — Financial Sectors*
As of June 30, 2008

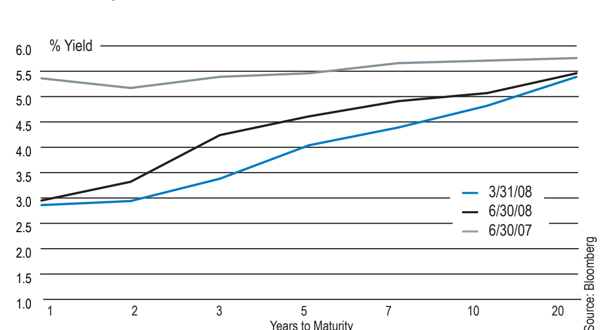


*SIFMA estimates

U.S. Corporate Spreads to U.S. Treasury — 10-Year
Jan. 2002–Jun. 2008



U.S. Corporate: AAA Industrial — Yield Curves



Investment-Grade Issuance Recovered in Second Quarter; Surges Ahead of Year-Ago Levels

Non-convertible investment-grade issuance increased 49.8 percent, to $306.1 billion, from last quarter's $204.4 billion and moved 5.3 percent above issuance in the second quarter last year. Consistent with the financial sector's capital raising strategies, financials remain the dominant investment-grade issuing sector, with commercial banks, investment banks and other credit institutions accounting for nearly 60 percent of investment-grade volume in the second quarter. Dating back to the first quarter of 2007, the financial sector has maintained an overwhelming majority in investment-grade issuance. Credit strategy suggests that the looming fear of inflation, a vulnerable economy, and interest rates were the reasons why the first half of 2008 was so heavily front loaded with new issues.

High-Yield Issuance Rose in Q2

Non-convertible high-yield debt issuance rose to $25.3 billion in the second quarter of 2008, a tremendous 328.8 percent increase from the $5.9 billion issued in the first quarter. The increase shows a remarkable rebound from the previous quarter, but high-yield issuance totals are still down 55.5 percent compared to the second quarter of 2007. The energy and power sector was by far the largest sector accounting for 33 percent of the total high-yield issuance, with the industrial sector in second place at 16 percent.

Convertible Issuance, Medium-Term Note Issuance Rose in Second Quarter

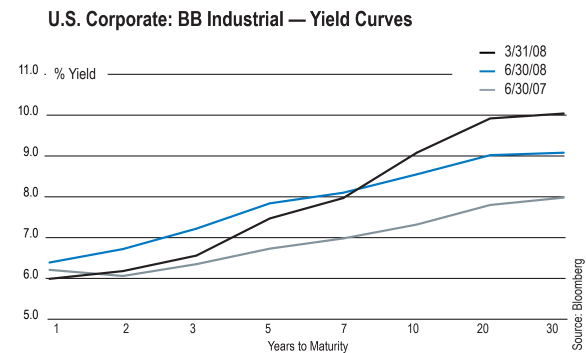
Convertible issuance (investment-grade and high-yield) increased during the second quarter to $19.4 billion, a 198.5 percent increase from the dismal $6.5 billion recorded in the first quarter. Although a substantial recovery was made, the second-quarter 2008 total was 31.4 percent below the $28.3 billion issued in the second quarter of 2007.

Medium-term note (MTN) issuance increased to $230.3 billion, up 11.8 percent from the first-quarter total of $206 billion and 30.7 percent above the $176.2 billion issued in the second quarter of 2007.

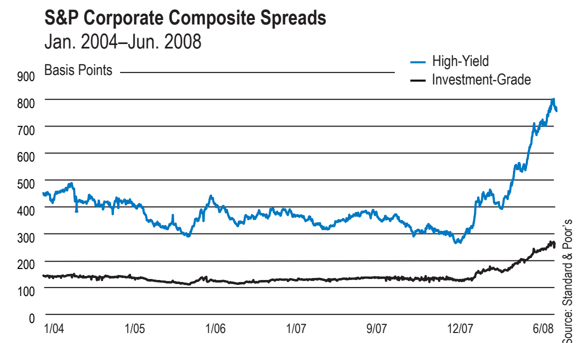
Trading Volume Decreased Slightly in the Second Quarter

According to the FINRA's TRACE System, estimated total investment-grade average daily trading volume increased in the second quarter to $8.6 billion, 2.2 percent above that in the first quarter, but 8.2 percent below the second quarter 2007 average. The second-quarter high-yield average daily trading volume of $4.1 billion marked a 6.5 percent decrease from the previous quarter, but was 3.9 percent higher than the average in the same year-earlier period. The slight decrease in overall average daily trading volume, inclusive of both investment-grade and high-yield trading volume, reflects the relatively unchanged market between the first and second quarters of 2008.

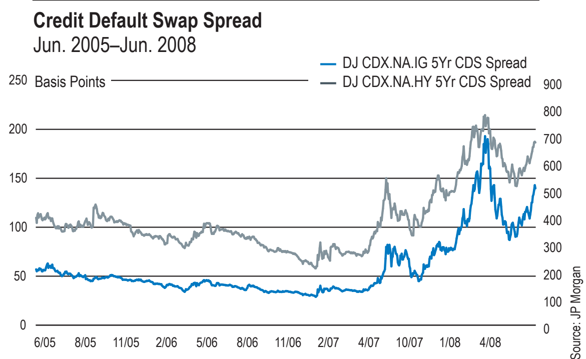
U.S. Corporate: BB Industrial — Yield Curves



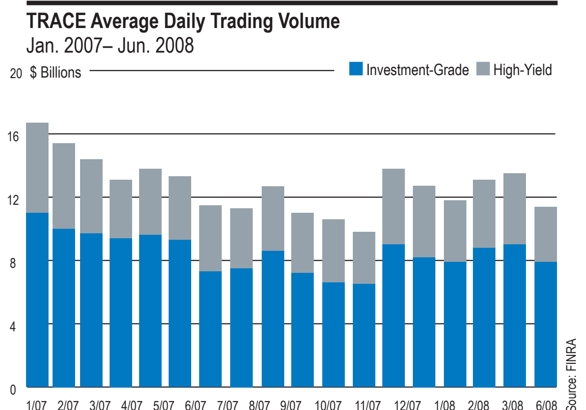
S&P Corporate Composite Spreads
Jan. 2004–Jun. 2008



Credit Default Swap Spread
Jun. 2005–Jun. 2008



TRACE Average Daily Trading Volume
Jan. 2007– Jun. 2008



Preferred Stock Underwritings Set New Record; Trading Volume Slows; Short Interest Soars

The Dow Jones Industrial Average (DJIA) and S&P 500 joined the NASDAQ Composite Index in bear territory on July 2 and July 9, respectively, when they declined 20 percent from their peak levels. The UK, Germany, France, Hong Kong, Shanghai and India were other major markets that crossed the bear market threshold in 2008. While rising energy prices have created pressure in the markets, soaring food and other commodity price increases have also exerted their influence, contributing to an estimated global inflation rate of 5.5 percent, up from 3.5 percent at the beginning of the year. For the quarter, the DJIA and S&P 500 declined by 7.4 percent and 3.2 percent, respectively, while the NASDAQ rose 0.6 percent. Compared to the end of the first half in 2007, the major U.S. indices closed first-half 2008 down 15.4 percent (DJIA), 14.9 percent (S&P 500) and 11.9 percent (NASDAQ).

Share Trading Volume Catches Breath

The New York Stock Exchange's (NYSE) second-quarter average daily share volume was 2.4 billion shares, a decline of 15.4 percent from the previous quarter, while NASDAQ average volume was 2.4 billion shares, down 14.2 percent. Compared to the second quarter a year ago, NYSE volume rose 10.1 percent and NASDAQ rose by 0.4 percent. While falling in the second quarter, NYSE and NASDAQ average share trading volumes are still on pace for another record year due to record highs in the first quarter.

The NYSE's average daily dollar trading value reached $81.4 billion in the second quarter, down 14.1 percent from the previous quarter but still above the $80 billion level for the sixth consecutive quarter. Average daily dollar trading value on the NASDAQ reached $66.1 billion, down 7.3 percent from the previous quarter. Compared to the second quarter a year ago, NYSE dollar volume fell by a modest 2.5 percent, while NASDAQ rose by 19.9 percent.

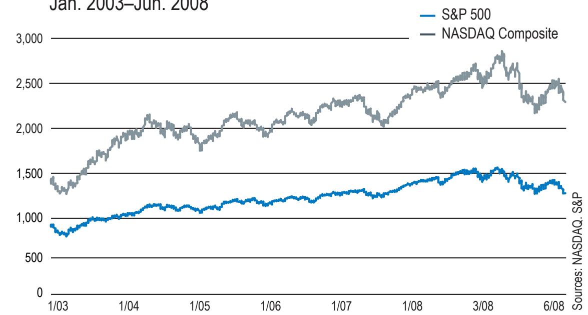
Short Interest Sets Record in Second Quarter

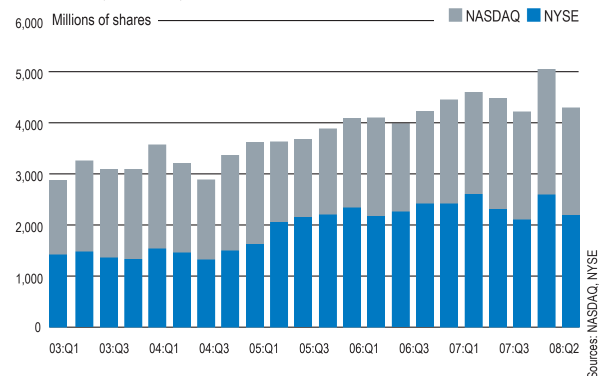
NYSE short interest volume rose to 18.13 billion shares, which represents 4.3 percent of the total outstanding shares on the NYSE for the June 30 quarter end reporting period, increasing by over 2.5 billion shares, or 16.3 percent, from the previous quarter, and 5.38 billion shares above the level at the start of the year. The impact of the SEC's mid-July emergency order addressing concerns over abusive short selling may be seen in short interest data in future periods.

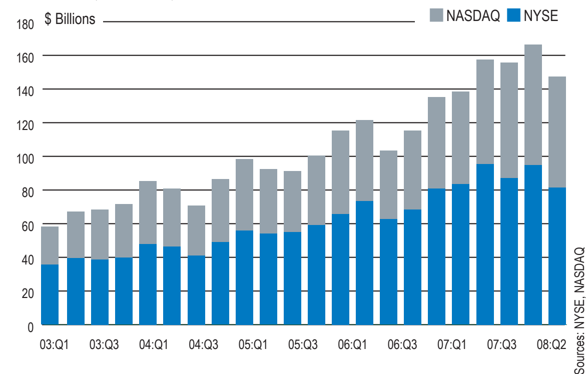
Total Corporate Issuance

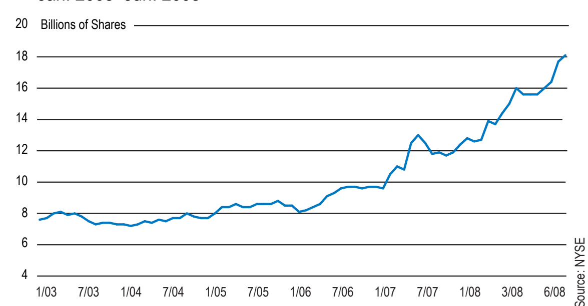
Second quarter total corporate underwriting volume, including straight and convertible debt, asset-backed and non-agency mortgage-backed securities, and equity, was $538.5 billion on 643 deals, up 52.9 percent from $349.0 billion on 574 deals in the first quarter but 47.7 percent below the volume in the second quarter 2007. While underwriting is still relatively soft, the backlog of offerings is beginning to clear. Equity underwriting made a significant recovery in the second quarter due to higher demand for technology, media and communication stocks; debt issuance, however, fell due to steep declines of mortgage-backed securities and high-yield bond issuance.

Preferred stock underwriting grew at a record-setting pace in the second quarter, pushing first-half volume to $73.1 billion, surpassing the $60 billion 2007 full-year record. Second-quarter preferred stock issuance totaled $40.2 billion on 32 deals, up 22.1 percent from the previous quarter and up 487.1 percent from the second quarter of 2007. Of the 32 preferred issues in the second quarter, 11 were by bank or bank holding companies, com-









 continued from page 12

pared to 18 deals reported in the first quarter, of which 12 were by bank or bank holding companies. Closed-end-fund offerings dropped in the second quarter to $0.2 billion on 2 transactions, a dramatic decline from the $3.4 billion on 12 deals recorded in the previous quarter and the $14.3 billion on 39 deals in the same year-earlier period. Approximately 75 percent of closed-end-fund second-quarter underwriting volume occurred in June, with none in April.

Combining corporate debt (straight bonds and securitizations) and equity underwriting, the securities industry raised $526.7 billion in the second quarter of 2008, an increase of 52.9 percent from the previous quarter, but down 47.4 percent from the same year-earlier quarter, when a record-setting $1 trillion was raised. The linked-quarter increase can be attributed to straight corporate debt (up 56.7 percent), preferred stock (up 22.2 percent) and follow-on stock offerings (up 272.5 percent).

Total IPOs and "True IPO" Markets Rise

U.S. initial public offerings (IPOs) raised $5.1 billion in the second quarter, up 12.5 percent from the previous quarter, but down 83.3 percent from the second quarter 2007. "True IPOs," which exclude closed-end-fund IPOs, totaled $4.8 billion, a more than fourfold increase from the previous quarter but 69.1 percent below the level in the second quarter-2007. The IPO backlog declined in dollar terms for the third straight month, to $21.6 billion, on 114 deals, down $15.4 billion, or 41.6 percent, from the previous quarter.

Second-Quarter Secondary Offerings Set Record

Second-quarter secondary underwritings set a new quarterly record of $50.8 billion on 103 deals, eclipsing the previous record of $47.3 billion on 169 deals set in the first quarter of 2000. This represents an increase of 272.5 percent over the first-quarter 2008 level and 54.4 percent above the second-quarter 2007 level.

U.S. M&A Volume Rebounds After Three Quarterly Falls

M&A announced deal volume slipped over the previous three quarters, only to surge in the second quarter of 2008 to $427.5 billion, a 180.2 percent increase from the previous quarter of $152.5 billion and the third highest quarterly total this decade, although 16.9 percent below that in the second quarter 2007. The number of announced M&A deals declined 9.4 percent from the previous quarter and 24.7 percent from the second quarter in 2007.

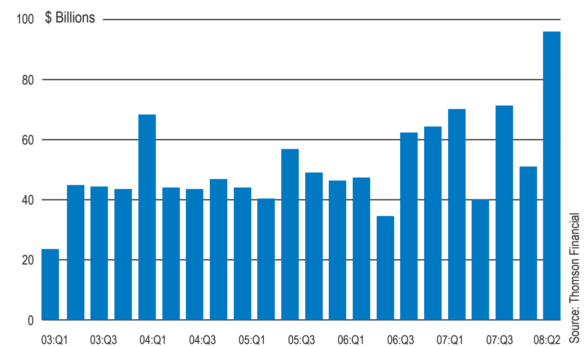
P/E Breaches 5-Year Average

The P/E ratio of the S&P 500 stood at 22.2 at the end of June, up 12.7 and 25.5 percent from the previous quarter and the same period last year, respectively. While it was the first quarter to close above the 5-year average of 19.80 in more than three years, the end-second-quarter P/E ratio at the end of the second quarter remained below the 10-year average of 26.91.

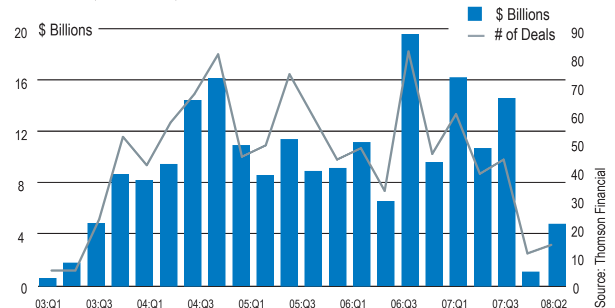
Share Buyback Volume Lower

Corporate share repurchases declined for a third straight quarter, with second-quarter buyback volume falling on both the NYSE and NASDAQ by 40.4 percent and 70.3 percent, respectively. Announced buyback volume on the NYSE was $45.4 billion on 36 share repurchase programs, while NASDAQ share buyback volume was $2.8 billion on 13 share repurchase programs. The lower buyback levels in this quarter reflect continuing capital conservation and management strategies as well as a downshift in equity prices.

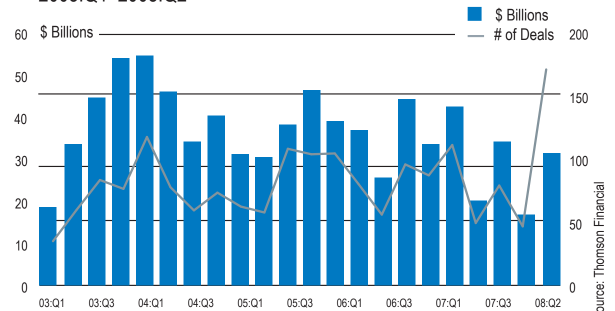
Total Equity Underwriting
2003:Q1–2008:Q2



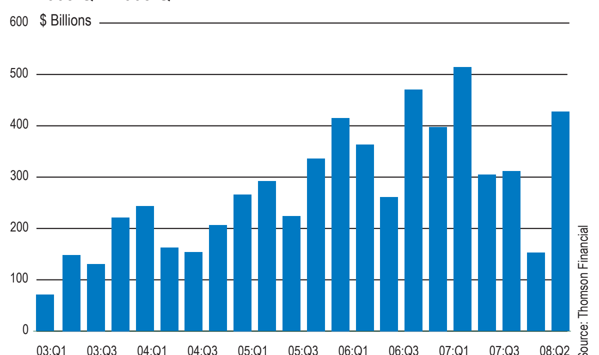
Quarterly "True" IPO - Excluding Closed-End Funds
2003:Q1–2008:Q2



Quarterly Secondary Stock Offerings
2003:Q1–2008:Q2



U.S. Mergers and Acquisitions Announced Deals
2003:Q1–2008:Q2



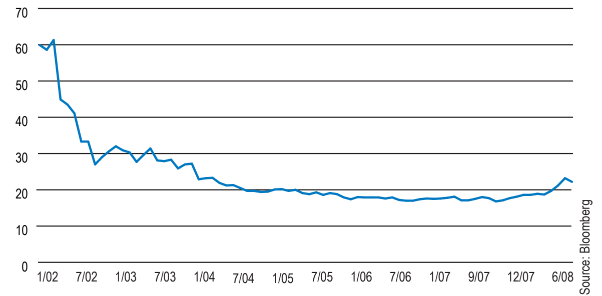
CBOE Volatility Index Moves Higher

The Chicago Board Options Exchange Volatility Index (VIX) closed at 23.95 at the end of the quarter. June had the highest month-end level of the turbulent second quarter, following 20.79 and 17.83 in April and May month-ends, respectively, and a peak of 24.12 on June 11. The VIX remained above the 5-year average and 10-year averages. Current market conditions suggest that volatility will continue to remain elevated.

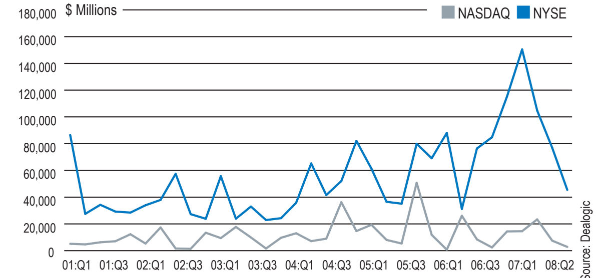
Venture Capital/Private Equity

Venture capital investments in the US declined for the second consecutive quarter in second-quarter 2008 but remained above $7 billion for the seventh consecutive quarter. However, capital disbursements declined by 1.5 percent to $7.39 billion from $7.50 billion at the end of the second quarter of 2007. Private equity investments were up slightly by 0.3 percent to $7.39 billion, compared to the $7.36 billion in second quarter of 2007. The number of private equity deals increased to 990, 1.3 percent more than the 977 deals recorded in the first quarter.

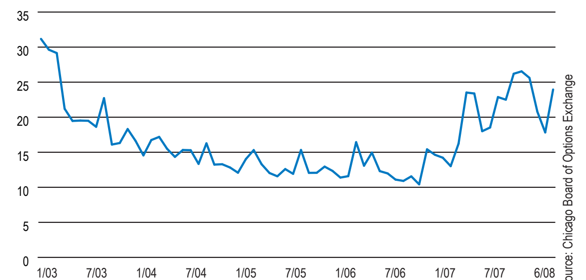
S&P P/E Ratio
Jan. 2002–Jun. 2008



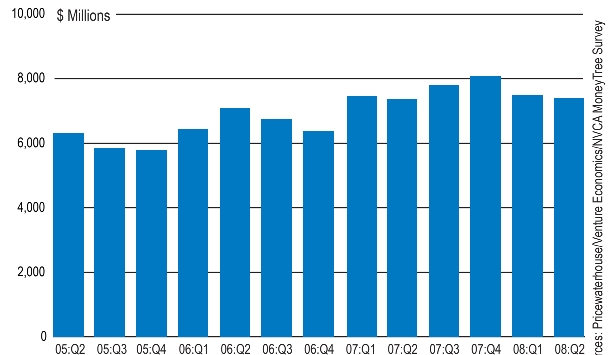
NASDAQ and NYSE Share Buybacks
2001:Q1–2008:Q2



SPX Volatility Index (VIX) Close
Jan. 2003–Jun. 2008



Venture Capital Investment in U.S. Companies
2005:Q2-2008:Q2



Second Quarter 2008: Leveraged Loan Market Review[2]

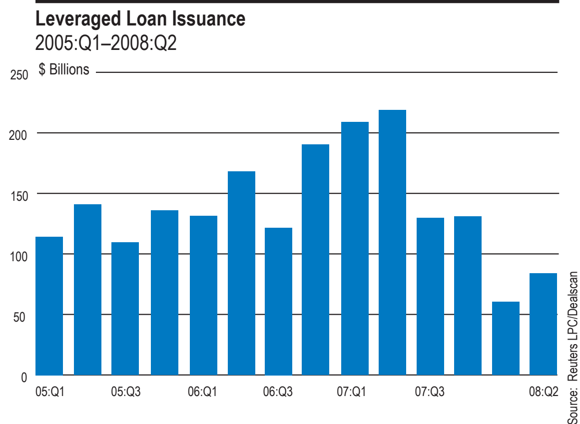
Across the broader economy, recession woes have now collided with inflationary fears as food and energy prices have soared while the U.S. dollar remains weak. Whether it was due to the credit crises, the mortgage meltdown or a series of bad decisions, the final result is a weakening U.S. economy; so weak that an estimated 325,000 jobs were lost so far this year. Following the worst performance ever during the three-month period of first -quarter 2008, the syndicated bank loan market rallied back amid the global economic downturn to post record returns. As loan prices rallied off their first-quarter all-time lows, returns were once again quite impressive. During the second quarter, Loan Participation Funds averaged a whopping 4.49 percent return. High-yield bonds and equities, however, did not share such strong results - bond funds dropped by an average of 0.21 percent, while equities, particularly U.S. bank stocks, fell to their lowest level in years.

On the supply side, second-quarter 2008 leveraged loan issuance totaled $84 billion. Although the figure represents a 39 percent quarter-over-quarter increase, lending activity has been mired in a slump for the past four quarters. Across the first half 2008, total leveraged loan volume was $144.5 billion, a 66 percent fall from the record $428 billion of the first half of 2007. The silver lining to the drop in leveraged lending is that the diminished supply may help rebalance the supply and demand equation and, in turn, revitalize the market. As a result of the lack of new-issuance volume, arrangers were able to reduce the underwriting overhang of pre-correction paper by an estimated $47 billion during the second quarter. This was accomplished in large part by block sales of these loans at prices in the mid-'90s, well below their par value. By the end of June, the calendar of unwritten loans shrank to a new low of $64 billion. The calendar, which had peaked last July at $237 billion, compressed to roughly $110 billion during the first quarter from $156 billion at year-end.

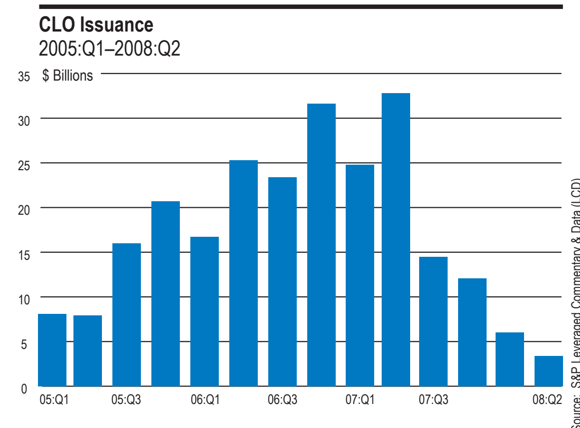
Meanwhile, on the demand side, collateralized loan obligation (CLO) issuance - long the funding giant of leveraged loans - continued its precipitous slide. During the second quarter, CLO issuance totaled a measly $3.4 billion – more than $29 billion less than was reported during the same quarter last year. A surprisingly positive trend is that, despite the disappearance of CLO issuance, non-traditional accounts have begun to enter the loan market and might well prove to be major players in the months ahead. While CLO managers were left to grapple with historically wide AAA spreads, these non-traditional lenders, such as distressed funds and private equity firms, began to take advantage of the attractive yields found both in the primary and secondary loan markets, and subsequently began to provide much-needed liquidity. These new accounts have begun to replace not only the large funding void left behind by the lack of new CLO vehicles but also some highly levered players, such as hedge funds, that were either forced to close shop or simply found the loan asset class no longer attractive, given the massive reduction in the amount of leverage being offered in today's market.

Still another positive result in the second quarter was the return of retail money to the asset class. According to AMG data, inflows into daily access funds turned positive in May, at $61 million, and expanded to $242 million in June. Such much-needed inflows represented a dramatic reversal from the $325 million of redemptions during March, and the record $1.3 billion in redemptions during February. Under more balanced supply and demand conditions and with the emergence of less levered accounts, the market could stabilize and make a pleasant comeback in the second half of the

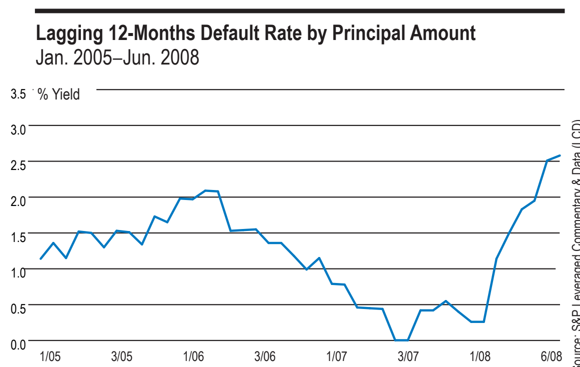
Leveraged Loan Issuance
2005:Q1–2008:Q2



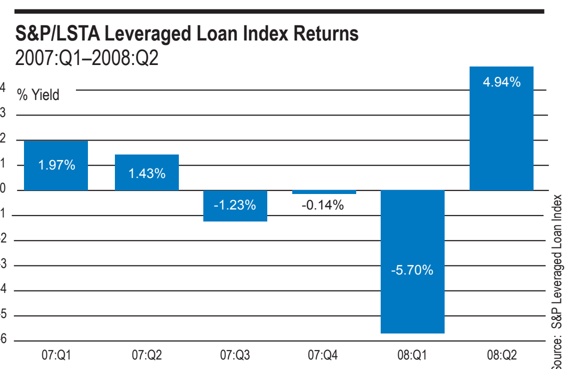
CLO Issuance
2005:Q1–2008:Q2



Lagging 12-Months Default Rate by Principal Amount
Jan. 2005–Jun. 2008



S&P/LSTA Leveraged Loan Index Returns
2007:Q1–2008:Q2



[2] The author of the Leveraged Loan discussion is Ted Basta, Loan Syndication and Trading Association (LSTA), Vice President of Market Data & Analysis

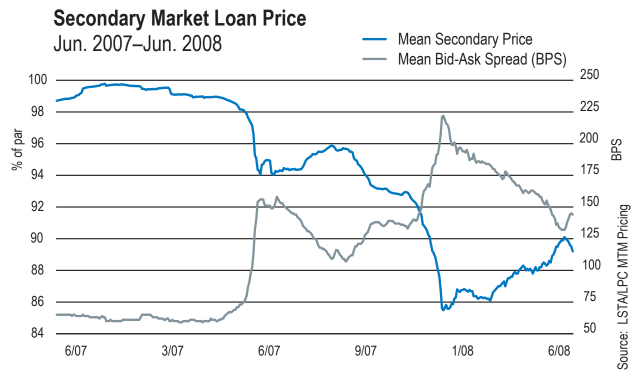
year. Factors such as rising oil prices, reduced consumer spending, higher unemployment rates, rising inflation and the housing market will all influence the market's reemergence.

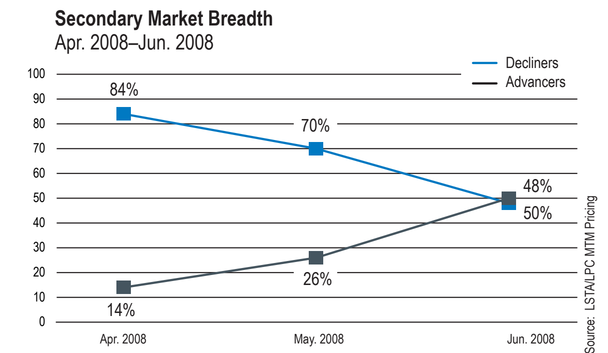
Heading into 2008, many loan experts thought that the market would see a default rate of about 5 percent for the year. However, during the first quarter, 13 institutional loans defaulted, pushing the first-quarter run rate to 6.1 percent, well surpassing the market's estimate and its comfort level. Fortunately, during the second quarter, the number of defaults moderated considerably, and the 5 percent default figure again appeared reasonable to lenders. After jumping 1.57 percentage points by the end of the first quarter from an all-time low of 0.26 percent, the loan market's lagging 12-month default rate by number of issuers moderated somewhat during the second quarter, but still rose to 2.58 percent by the end of June. Nonetheless, given the many options embedded in pre-third-quarter-2007 loan agreements (PIK-toggle or Cov-Lite deals) companies should find breathing room when facing interest payments. When and if they do default, recoveries could fail to match historical norms. Still, the risk-adjusted returns of leveraged loans, which are senior secured and sit atop the capital structure, remain attractive relative to other asset classes, although today's returns not only with a higher level of volatility but also the expectation of rising default rates.

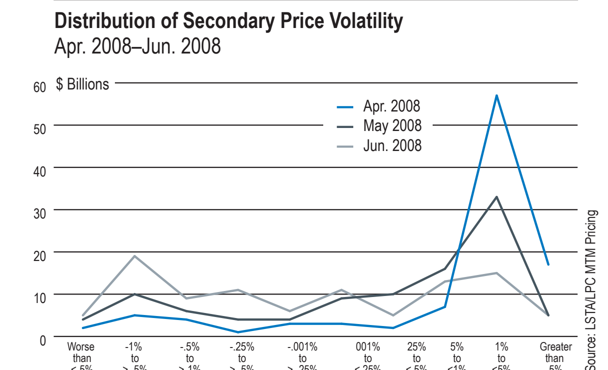
After experiencing a record loss of 5.74 percent during the first quarter, the S&P/LSTA Leveraged Loan Index (LLI), the widely used industry benchmark, fought back with a vengeance and posted a record gain of 4.49 percent in second-quarter 2008. Following record gains during April, loan prices continued to rally in the secondary market through the third week of June, but then turned decidedly negative as the rally came to an end. Thanks in large part to the last six trading sessions of June, the S&P/LSTA Leveraged Loan Index posted a 3-month-low return of 0.25 percent, following May's 0.94 percent and April's record high of 3.70 percent. This complete reversal of fortune reaffirms the volatile state of the bank loan market. The volatility of the LLI, as measured by the lagging 12-month standard deviation of monthly index returns, skyrocketed to 2.73 percent by the end of June 2008, from just 0.53 percent at the end of June 2007. Nonetheless, the recovery of the LLI during the second quarter was extraordinary.

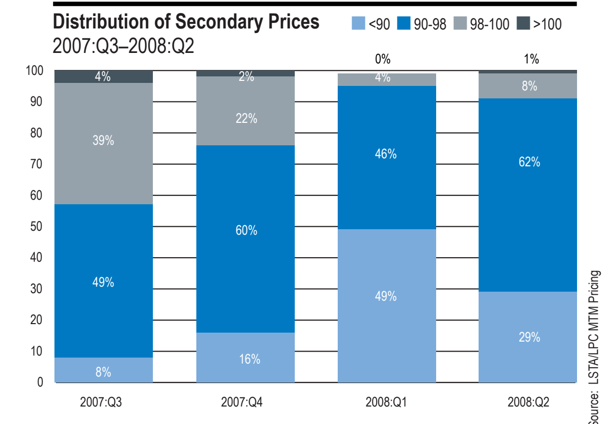
The index's strong second-quarter performance was echoed by the LSTA/LPC Mark-to-Market pricing (MTM) dataset's steady price appreciation since the end of first-quarter 2008. The MTM dataset, which comprises U.S. term loans quoted by three or more broker dealers, pulled off a 3.5 percent surge in average bid level during the second quarter, after succumbing to a 6.3 percent tumble in the first quarter. After sliding to an all-time low of 85.48 during early February of this year, the average price of the MTM dataset has gradually recaptured lost ground, rising above the 90 price barrier by July 20, a price level not seen since the beginning of the year. By the end of June, though, the average MTM price fell back to 89.23, as the last six trading sessions shaved 75 bps from the market average. After widening to a record high level of 222 bps on February 13, the MTM dataset's bid-ask spread, commonly used as a measure of liquidity, tightened to 132 bps by June 20, and then proceeded to widen back out to 144 bps by month-end. The last time the bid-ask spread was tighter than 140 bps was back in January. Even after June's month-end plunge, bids still rose by more than 300 bps while bid-ask spreads tightened by 40 bps.

By month-end June, it became clear that the second-quarter secondary market rally had come to a halt. For the first time all quarter, monthly market breadth was negative, albeit slightly. During June, advances were outnumbered by declines by a ratio of 0.96 to 1, with 48 percent of the









MTM dataset reporting gains following the 70 percent and 84 percent figures reported during May and June. MTM price volatility was skewed slightly toward the negative side of the distribution as more loans recorded MTM price losses than price gains. During June, loans that recorded price gains between 1 percent and 5 percent accounted for 15 percent of the entire MTM dataset, while loans reporting gains of greater than 5 percent comprised 5 percent of the dataset. On the negative side of the distribution, loans that recorded price losses between 1 percent and 5 percent accounted for 19 percent of the MTM dataset, while loans reporting losses of greater than 5 percent comprised 5 percent of the MTM dataset. Last month those figures were only 10 percent and 4 percent, respectively.

The distribution of secondary prices at month-end June also illustrates the loan market's second-quarter rally, at least what is left of it by the time this review is published. By the end of the second quarter, roughly 29 percent of all loans in the MTM dataset were priced below 90, compared with the record high 49 percent figure reported at the end of 08:Q1. Those loans previously bid below 90 had migrated up into the 90 to 98 price range, which increased to a record 2008 high of 62 percent by month-end June from the 46 percent figure reported at month-end March.

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