Research
U.S. Credit Market Outlook

THE BOND MARKET ASSOCIATION

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The Bond Market Association is pleased to present the results of its annual issuance forecast for 2006 in the municipal, corporate, money market and securitization and structured finance markets. This report provides information on anticipated issuance volumes and interest rate and credit spread outlooks. The forecast is based on a survey of the Association's member firms conducted during the first half of December 2005. Specialists at member firms in each of the market sectors provided the forecasts.

This year we continue our practice of expanding the depth of forecast information for the specific market sectors. The innovations in this year's survey and report reflect important trends and developments in the marketplace. This year's enhancements include (a) updated CDO product classifications to reflect product structure trends over the past year; (b) forecast of the five-year Credit Default Swap North America Investment Grade (CDX.NA.IG.5 5Y) spread, widely followed by institutional investors; and (c) mortgage-related securities issuance for MBS based on adjustable-rate mortgages.

Bond Issuance in the Credit Markets to Slow in '06 as Sustained Economic Growth Leads to Modest Rise in Rates; CDO, Money Market, Corporate Volumes Expected to Rise

The median forecast for credit market bond issuance—including the municipal, corporate, asset-backed securities, CDOs and mortgage-related securities markets—is a decline of 13.3 percent in 2006 to $3.56 trillion, compared to an estimated $4.10 trillion in 2005. The projected decrease results from an expected rise in interest rates fueled by continued and sustained economic expansion and the Federal Reserve's transition from monetary accommodation. The higher rates are anticipated to have the greatest effect on MBS issuance as the housing sector moderates and the refinancing boom fades from the record pace of recent years. The higher rates are also expected to slow the pace of municipal bond refunding. While the booming home-equity ABS issuance is projected to slip from record levels based on a combination of housing sector moderation and higher and rising short-term rates, auto loan and credit card receivable ABS that benefit from personal income and employment gains are expected to rise. Other sectors where issuance is expected to grow in the developing market environment include CDO products, money market instruments and corporate bonds.

The trends should be viewed within the context of the economic environment and in relation to recent history. Since the Fed began in mid-2004 to "remove accommodation at a measured pace" through a series of thirteen 25 basis point hikes in the target Fed funds through year end 2005, there has been only a moderate rise in longer-term interest rate levels. The 10-year Treasury yield on December 30 of 4.39 percent is just 18 basis points above where it was at the beginning of the year. As interest rates, especially at the short end of the yield curve have moved up, the yield curve itself has flattened, which is expected at this point of the economic cycle as a result of the market's confidence in Federal Reserve policy, controlled inflationary expectations, and demand for dollar-denominated assets especially among non-U.S. investors. The yield curve inversion in late December may be the result of these factors rather than a prediction of an economic downturn.

As we enter 2006, the consensus view of the economic environment is one of sustained economic expansion (though moderating later in 2006), continued business and consumer spending growth, favorable financial market conditions and the eventual completion of Fed rate hikes. While core inflation remains within the range (albeit at the upper end) considered to be acceptable *continued on page 2*

Highlights Median responses to the survey:

- Total 2006 issuance for the sectors covered by this survey is expected to be $3.56 trillion, 13.3 percent lower than the $4.10 trillion issued in 2005.
- Long-term municipal issuance in 2006 will be $352 billion, down 13.5 percent from the 2005 issuance volume of $407 billion.
- Corporate issuance will be $719 billion in 2006, 1.6 percent more than the $708 billion issued in 2005.
- Commercial paper outstanding will be $1.74 trillion at the end of 2006, compared to $1.65 trillion on November 30, 2005.
- ABS issuance in 2006 will be $636 billion, down 12.5 percent from the $727 billion issued in 2005.
- Cash CDO issuance in 2006 will be $173 billion, 8.8 percent higher than the $159 billion issued in 2005. Synthetic CDO issuance will be $80 billion in 2006.
- Mortgage-related issuance will be $1.68 trillion in 2006, down 20.2 percent from the 2005 issuance volume of $2.10 trillion. ARM mortgage-related issuance is expected to decrease 26.7 percent in 2006, to $633 billion.

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Bond Issuance in the Credit Markets to Slow

to Federal Reserve policymakers, inflation remains the dominant concern of the markets and policymakers. Within the business sector, we expect to see a continuation of near-double digit business capital investment growth, solid corporate balance sheets and profit growth. On the consumer side, we expect consumer spending gains to be driven more by rising income and jobs growth than by home price appreciation as the pace of housing sector growth moderates. This economic environment generally remains favorable to the credit outlook for both consumers and businesses. Corporate credit quality gains, though, seem to have peaked and are fully incorporated in credit spreads, and investors are becoming more risk-conscious. Rising rates, event risk, balance sheet re-leveraging and the peaking of the credit cycle suggest some credit spread widening, though limited by the generally strong corporate financial positions.

MUNICIPAL MARKET

Higher Interest Rates Expected to Reduce Total Municipal Volume Due to Fewer Refundings; New Money Issuance to Rise

MUNICIPAL ISSUANCE

$ Billions

	2005	2006	% Change
Short-Term	50	44	-12.0
Long-Term	407	352	-13.5
Total	457	396	-13.3

Source: Thomson Financial for 2005 numbers

The median forecast projects total municipal issuance of $396 billion in 2006, a 13.3 percent decline from the record $457 billion issued in 2005, a year characterized by strong refunding volumes that exceeded expectations. Even with the forecasted decline, it would be the fifth highest issuance year. Both short-term and long-term municipal issuance are expected to be lower.

Long-term municipal issuance is estimated to be $352 billion in 2006, down 13.5 percent from the estimated $407 billion issued in 2005. The survey respondents' forecasts for 2006 long-term issuance ranged from $295 billion to $375 billion. Short-term note issuance is expected to be $44 billion, 12.0 percent less than in 2005, with forecasts ranging from $29 billion to $50 billion.

Refunding activity, which led to the record volume in 2005, is expected to fall sharply from 44 percent of total long-term issuance in 2005 to 25 percent in 2006, a decline from $179 billion to $88 billion. This lower projected refunding level reflects the expectations of a rising rate environment in 2006. Respondents, however, see new money issuance increasing in 2006 from 56 percent to 75 percent of total long-term issues, or an increase from $228 billion to $264 billion.

Respondents expect general purpose and transportation to be the largest issuing use-of-proceeds sectors in the coming year. Education was the top issuance sector in 2005.

Interest Rate Outlook

The consensus among respondents is that municipal yields will rise 50 to 100 basis points in 2006. The general view is the higher rates will come about through a parallel upward shift in the yield curve (based on the shape prior to the late December inversion) – that is, the yield curve shape is projected to remain flat in 2006. The respondents also indicate that the municipal-to-taxable yield ratio will decline slightly in 2006. The median projection for the ratio of the 10-year Treasury and AAA G.O. municipal securities is for 85 percent at the end of June and 84 percent at the end of the year. At year-end 2005, the ratio stood at about 88 percent. Thus, the expectation is that tax-exempt yields may not rise as much as taxable yields.

Risks in the Forecast

Survey respondents identified several risks to their 2006 issuance forecast. The most significant risk would be a change in economic fundamentals, such as GDP growth, the general direction of interest rates and the shape of the yield curve. They also noted the effect of continuing tightening by the Fed which would further reduce refunding volumes and possibly increase the municipal-to-taxable yield ratio. Panelists also noted that tax reform, IRS audits, and terrorist events posed potential risks to their forecast.

CORPORATE BOND MARKET

Corporate Bond Issuance to Increase Slightly Led by High-Yield Sector

Based on the median survey response, total corporate bond issuance, including both investment grade and high-yield securities, is expected to increase in 2006 by 1.6 percent to $719 billion. The forecast suggests rising issuer demand for external financing as a result of projected near-double digit surge in business capital investment, M&A transaction volume exceeding 2005, lower cash levels on corporate balance sheets as some corporations "re-leverage," and the flat to inverted yield curve. The volume is expected to increase despite the potential for somewhat higher funding costs as a result of anticipated higher benchmark yields and some credit spread widening from cyclically tight levels during much of 2005. Survey respondents indicated that issuance growth is likely to come from non-financial industry sectors in 2006 with financial industry issuance virtually flat.

Respondents forecast that the source of the volume growth will be high-yield issuance. The median investment-grade issuance forecast is $571 billion, a decline of 5.5 percent from $604 billion in 2005, with forecasts ranging from $425 billion to $725 billion. The median high-yield issuance forecast is $98 billion, or an increase of 30.0 percent over 2005. The high-yield forecasts ranged from $80 billion to $111 billion. The median convertible debt forecast projects a 72.4 percent increase in convertible debt from $29 billion in 2005 to $50 billion in 2006.

CORPORATE ISSUANCE

$ Billions

	2005	2006	% Change
Investment-Grade	604	571	-5.5
High-Yield	75	98	30.0
Convertible	29	50	72.4
Total	708	719	1.6

Source: Thomson Financial for 2005 numbers

10-YR CORPORATE INDUSTRIAL YIELD SPREADS

	Dec 05	Jun 06	Dec 06
AA Financial	89	75	85
BBB Industrial	124	135	140
Credit Default Swaps	46	60	54

Source: Bloomberg for 2005 numbers

Credit Spread Outlook

Panelists forecasted the 10-year AA financial, 10-year BBB industrial and the Credit Default Swap North America Investment Grade (CDX.NA.IG.5 5Y) index credit spreads. The consensus view is that, while the weaker sectors will be vulnerable, and there is a higher risk profile as we enter 2006, general market widening will be limited by corporate profit levels and financial positions and the still relatively low supply of corporate bonds relative to investor demand. The widening view is based on a moderating (though still solid) pace of corporate profit growth as the cycle matures, event risk and investor movement to less risky investments based on higher benchmark yields and increased risk aversion.

The median projections suggest some tightening early in the year for higher rated investment grade and widening for lower rated investment grade bonds. The median forecast calls for AA financial credit spreads to tighten to 75 basis points at mid-year and widen to 85 basis points by the end of 2006 compared to the 89 basis point spread as of late December 2005. The median forecast is for the 10-year BBB Industrial yield to widen in 2006 to 135 basis points at mid-year and 140 basis points by year-end, up from 124 basis points in late December 2005. The median forecast has the 5-year CDS investment grade index widening early in the year to 60 basis points by June 2006 and coming back to 54 basis points by year-end compared 46 basis points in late December 2005.

COMMERCIAL PAPER MARKET

Commercial Paper Outstanding Expected to Rise

The median forecast projects total commercial paper (CP) outstanding to continue to rise in 2006, supported by sustained GDP growth, strong gains in business capital investment and higher M&A volume. The expectation of a higher level of CP outstanding at the end of 2006 suggests that panelists expect capital investment and credit quality trends to more than compensate for the funding cost effect of rising Fed funds rates as the FOMC completes its transition from monetary accommodation.

Total CP outstanding is expected to grow to $1.74 trillion by the end of 2006, a 5.7 percent increase from the $1.65 trillion outstanding as of November 30, 2005. The largest increase during 2006 is expected to be in the unsecured financial CP sector. The median

COMMERCIAL PAPER OUTSTANDING			
$ Billions	2005*	2006	% Change
Asset-Backed CP	907	938	3.4
Non-Asset Backed CP	580	638	10.0
Nonfinancial CP	158	163	3.2
Total	1,645	1,739	5.7
Source: Federal Reserve System for 2005 numbers			

As of November 30, 2005

projection is for the outstanding volume to reach $638 billion, an increase of 10.0 percent. The survey median response has asset-backed CP (ABCP) outstanding increasing to $938 billion in 2006, up 3.4 percent from $907 billion in 2005. That increase takes into account product innovation in the ABCP market, including extendible products, and mortgage warehouse financing. The median survey response has A2/P2 or lower investment-grade CP outstanding at $70 billion in 2006. Based on the median forecast, total Euro CP outstanding is expected to end 2006 at $550 billion, and Certificates of Deposit (CD) outstanding at $650 billion.

Forecast Assumptions

The CP forecasts for 2006 are based on a number of key assumptions including GDP growth, the Fed funds rate, the shape of the yield curve, tax and accounting policy and M&A volume.

The median survey response has 2006 GDP growth peaking in the first quarter at 3.5 percent, with the growth rate slowing from that pace over the subsequent quarters to 2.9 percent in the fourth quarter of 2006. The consensus view is that the Federal Reserve will be approaching the end of its tightening cycle in the first half of the year. The median projection has the Fed funds rate at 4.75 percent by the end of the second quarter. Respondents also expect the yield curve to continue to remain flat next year.

The respondents were generally optimistic about the outlook for other operating assumptions. The consensus is that accounting policy changes will be favorable and tax policy changes will not have a material effect on 2006 short-term money market issuance. There is also an expectation that M&A volume will be higher in 2006.

ASSET-BACKED SECURITIES MARKET

ABS Issuance Slightly Lower than Record 2005 Level as the Home-Equity Loan Sector Slows from Record Pace; Other Leading ABS Sectors Increase

ABS ISSUANCE			
$ Billions	2005	2006	% Change
Home Equity	453	375	-17.2
Credit Cards	59	60	1.7
Auto Loans	88	95	8.0
Student Loans	63	70	11.1
Other	64	36	-43.8
Total	727	636	-12.5
Source: Thomson Financial for 2005 numbers			

New issue volume of asset-backed securities (ABS) is expected to decrease for the first time since 1999 as interest rates are expected to continue their gradual ascent in 2006. The median forecast has ABS issuance reaching $636 billion in 2006, about 12.5 percent less than the $727 billion volume in 2005.* Survey responses ranged from $601 billion to $665 billion.

The ABS market has set issuance records for each of the last six years, buoyed by the home-equity loan (HEL) sector. HEL issuance growth has resulted from historically low interest rates, new product development and the booming housing sector characterized by record sales volume and rising price appreciation. Going into 2006, higher mortgage rates are anticipated to slow housing sector growth to a more moderate pace and curtail issuance in the HEL sector. HEL is still expected to account for nearly 60 percent of the overall ABS market. The expectation of sustained economic growth and consumer spending bode well for the other ABS sectors, such as the credit card receivables and auto loan sectors.

The consensus view of the participants is that higher mortgage rates will lead to lower HEL issuance. The median projection is for HEL issuance of $375 billion in 2006, a decline of 17.2 percent from the $453 billion issued in 2005. Even with the decline, $375 billion would be the third highest HEL issuance year. Based on the median forecast, the auto loan sector will increase to $95 billion in 2006, up 8.0 percent from 2005. Auto sector growth reflects auto sales gains as gas prices recede from the 2005 peaks and a recognition that auto ABS can be a cost effective funding source for automakers. According to the median projection, the student loan sector will be the third largest market in 2006, with issuance totaling $70 billion, 11.1 percent above the $63 billion in 2005. Securitization issuance backed by credit card receivables is expected to continue to grow by 1.7 percent, to $60 billion. Credit card issuance had been in decline until the rebound that began early in 2005.

The survey also asked for opinions about sector credit spreads. The median projection has the HEL spreads tightening in the second half of the year to 98 basis points at the end of June and 93 basis points at the end of 2006. Auto and credit card spreads are expected to widen during the latter part of 2006.

CDO MARKET

CDO Issuance Growth Expected to Continue

Over the past few years, the collateralized debt obligations (CDO) market has arguably been the most dynamic credit sector in terms of both volume growth and product development. There has been significant growth especially in synthetic issuance but also in leveraged loan products in the cash CDO market. Structured finance (SF) issuance, led by home equity loan (HEL) and commercial real estate (CRE) backed security collateral, has grown at a particularly brisk pace in both the cash and synthetic sectors over the past year. Indeed, SF sectors have been accounting for the fastest growth rates. In general, these trends are expected to continue.

The median forecast has cash CDO issuance at $173 billion in 2006, an 8.8 percent increase over the estimated $159 billion volume issued in 2005. Leveraged (high-yield) loans are expected to be the largest volume cash CDO collateral sector at $63 billion in issuance, up 12.5 percent from 2005, and accounting for nearly 40 percent of total cash issuance. Strong corporate balance sheets, anticipated business capital investment growth and historically low default rates will undoubtedly contribute to the projected leveraged loan CDO volume growth. The second largest product class in 2006 is projected to be high-grade SF with a median issuance forecast of $57 billion, 18.8 percent higher than the 2005 volume. The median mezzanine SF CDO issuance forecast, however, is $18 billion, a decline from the $23 billion issued in 2005. While survey respondents expect the interest rate and housing sector environment to be supportive of structured finance issuance in 2006, the lower mezzanine volume may reflect some heightened credit quality concerns, especially in subprime and HEL products. CRE is projected to be the next highest group at $15 billion, 25 percent higher than 2005.

Common issuance measurement metrics and definitions are still evolving for the synthetic products, as the synthetic market has grown dramatically in a short period of time. Nevertheless, it is clear that synthetic issuance is the high-growth sector of the market. The median forecast has "bespoke"* (customized structures to meet specific individual customer needs) synthetic issuance reaching $80 billion in 2006, which would represent a growth rate well in excess of the projected cash market growth. The median forecast of $80 billion represents 32 percent of the total projected issuance of $253 billion, based on the survey responses.

CASH CDO ISSUANCE

$ Billions	2005	2006	% Change
High Yield Loans	56	63	12.5
High Grade Structured Finance	48	57	18.8
Mezzanine Structured Finance	23	18	-21.7
Commercial Real Estate (CRE)	12	15	25.0
Other	20	20	0.0
Total	159	173	8.8

**The ABS forecast excluded non-jumbo non-agency mortgage loan securitizations. The 2005 non-jumbo non-agency securitization volume was approximately $248 billion in 2005, based on the Thomson Financial data and definition for the sector.*

MORTGAGE-RELATED MARKET

Issuance of Mortgage-Related Securities Expected to be Lower in 2006 as Rates Rise and Housing Market Peaks

MORTGAGE-RELATED ISSUANCE			
$ Billions	2005	2006	% Change
Agency MBS	915	755	-17.5
Agency CMO	315	260	-17.5
Private-Label MBS	873	664	-23.9
Total	2,103	1,679	-20.2

FIXED 30-YR MORTGAGE RATE			
2006:Q1	2006:Q2	2006:Q3	2006:Q4
6.28	6.35	6.35	6.40

Survey participants expect the year-over-year downward trend in the issuance of mortgage-related securities, including agency and non-agency pass-through and collateralized mortgage obligations (CMO), to continue in 2006. The expectation is based on rising mortgage rates and slower growth in the housing sector after a string of record-setting years. The survey's median forecast for total mortgage-related issuance is $1.68 trillion in 2006, down 20.2 percent from the $2.10 trillion issued in 2005. Total mortgage-related issuance forecasts for 2006 ranged from $1.39 trillion to $1.92 trillion. The median forecast has 2006 agency MBS issuance declining by 17.5 percent to $755 billion and agency CMO issuance falling by 17.5 percent to $260 billion. The private label or non-agency MBS issuance is also expected to decrease in 2006 to $664 billion, down 23.9 percent from 2005.

The growth and development of affordable mortgage products has resulted in the relative share growth of ARM-backed issuance. Short rates are expected to continue to rise as the Fed transitions from accommodation, leading to higher initial rates and adjustments for ARM products. As a result, the median survey projection has total issuance of ARM mortgage-related securities decreasing over 26 percent to $633 billion, down from $863 billion in 2005, according to survey responses.

Mortgage securities issuance volumes are driven by mortgage origination volume. According to the Mortgage Bankers Association (MBA), mortgage originations are projected to decrease nearly 19 percent in 2006 to $2.26 trillion, down from the estimated $2.78 trillion in 2005, which is in line with the survey's mortgage securities issuance projection. The MBA forecasts refinancing activity to decrease, accounting for an estimated 35 percent of all mortgage originations from 47 percent in 2005.

The Bond Market Association's recent *Economic Outlook* report projected total housing sales—new and existing—to be 7.8 million units in 2006, lower than the record 2005 volume of 8.4 million units. The consensus view in the *Economic Outlook* survey also forecasted continued housing price growth, though at a more moderate pace.

Rate and Spread Outlook

Survey participants were also asked to share their views on mortgage interest rates, spreads and the yield curve. Participants unanimously expect the 30-year fixed-rate mortgage interest rate to increase during 2006, with a median forecast of 6.28 percent at the end of the first quarter, increasing to 6.40 percent by the end of the year. The mortgage rate at the time of the survey was about 6.20 percent. Most respondents expect AAA MBS option-adjusted spreads to Treasuries to widen slightly by June, then tighten during the second half of the year. In 2006, panelists generally expect the historically flat yield curve (which inverted late in December) to keep its shape or steepen slightly from where it was at the time of the survey in mid-December in 2006.

**The synthetic forecast number represents distributed bespoke synthetic issuance but excludes index flow such as CDS index-linked tranche synthetic issuance.*