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COMMISSION

MARKET UPDATE:
THE FUTURE OF CREDIT ENHANCEMENT

MARCH 6, 2013
10:00 AM – 11:30 AM (*PACIFIC TIME*)

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MARKET UPDATE:
THE FUTURE OF CREDIT ENHANCEMENT

INTRODUCTION: MARK CAMPBELL, EXECUTIVE DIRECTOR, CDIAC

CAPTIONING SERVICES
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CERTIFICATES OF ATTENDANCE

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MARKET UPDATE: THE FUTURE OF CREDIT ENHANCEMENT

MODERATOR: DAVID L. JOHNSON
MANAGING DIRECTOR, WELLS FARGO SECURITIES

SPEAKERS:

SUZANNE FINNEGAN
SENIOR UNDERWRITING OFFICER
BUILD AMERICA MUTUAL

JOANN HEMPEL
VICE PRESIDENT, SENIOR CREDIT OFFICER
MOODY'S INVESTOR SERVICE

RONALD MINTZ
PRINCIPAL, CREDIT ANALYST
VANGUARD

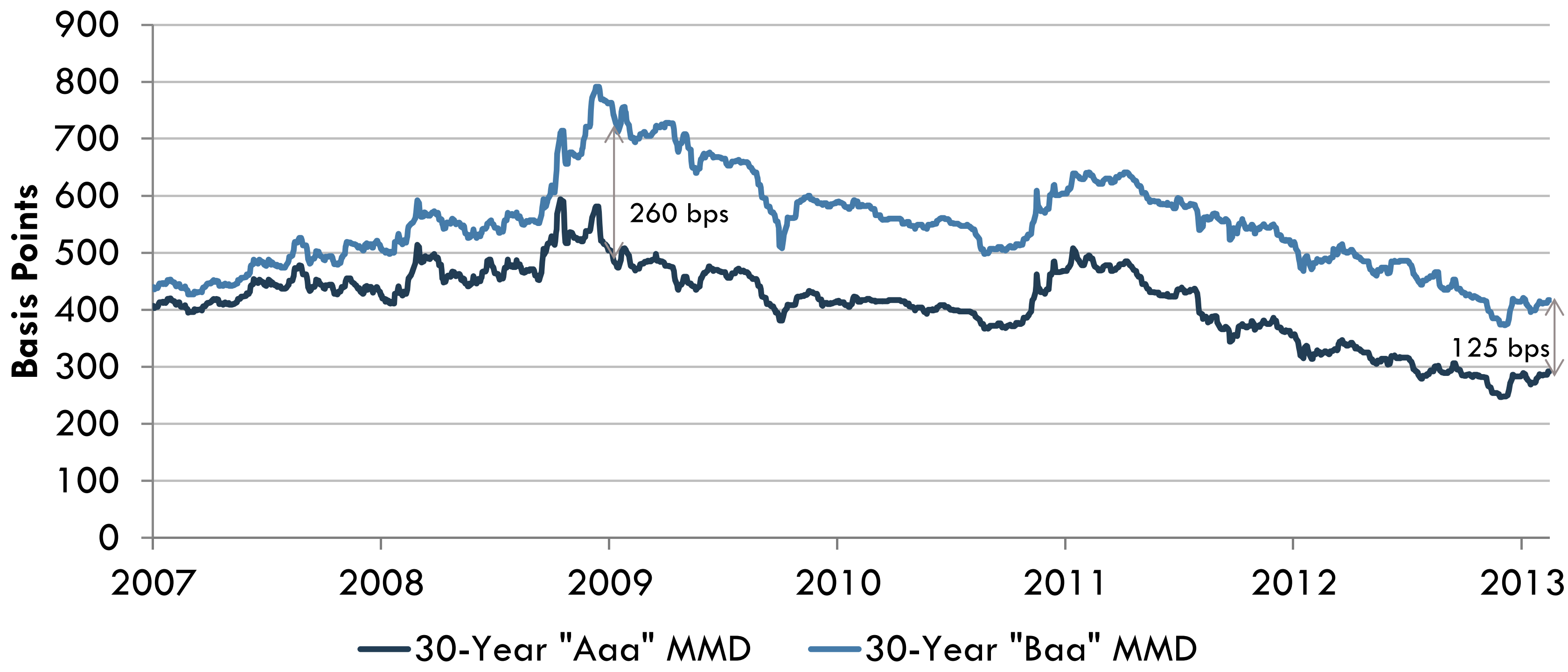
TIMOTHY SELF
MANAGING DIRECTOR
JP MORGAN

Webinar Outline

- The changing landscape of credit enhancement in the municipal market
  - Rise and fall (and rise?) of bond insurance
  - Ebb and flow of bank-provided liquidity and credit
- Credit enhancement providers' viewpoints
  - Why credit enhancement: Cost-effectiveness, market access, broadening investor appeal?
  - Bond insurance re-emergence?
  - New banking regulations (Basel III) effect on providers
  - New products
- Institutional investor viewpoint
  - Bond funds
  - Money market funds – Rule 2(a)7 and proposed changes
- Rating agency role
  - Rating the providers
  - Rating the structure

Credit Rating Spreads Compress

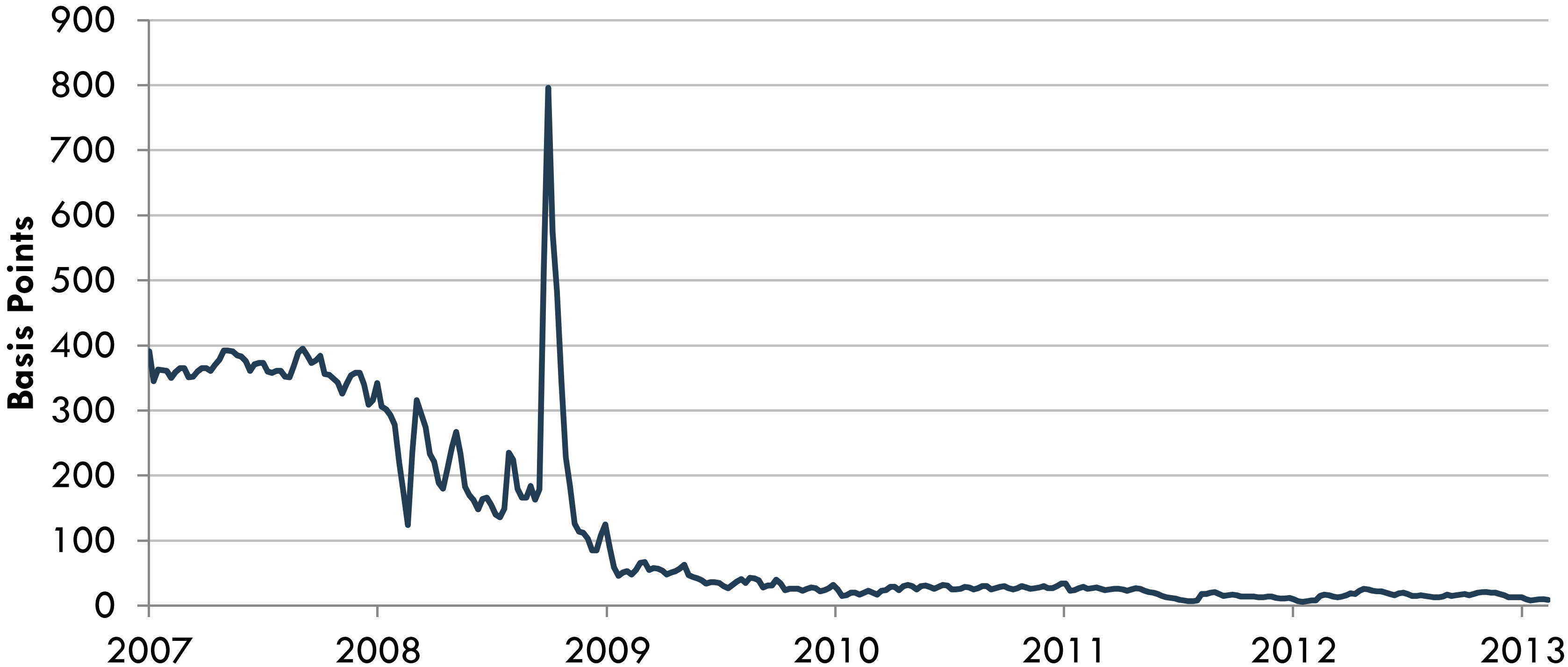
Interest Rates by Credit Ratings Today



Source: Thomson Municipal Market Monitor. As of February 15, 2013.

Short Term Rates Fall

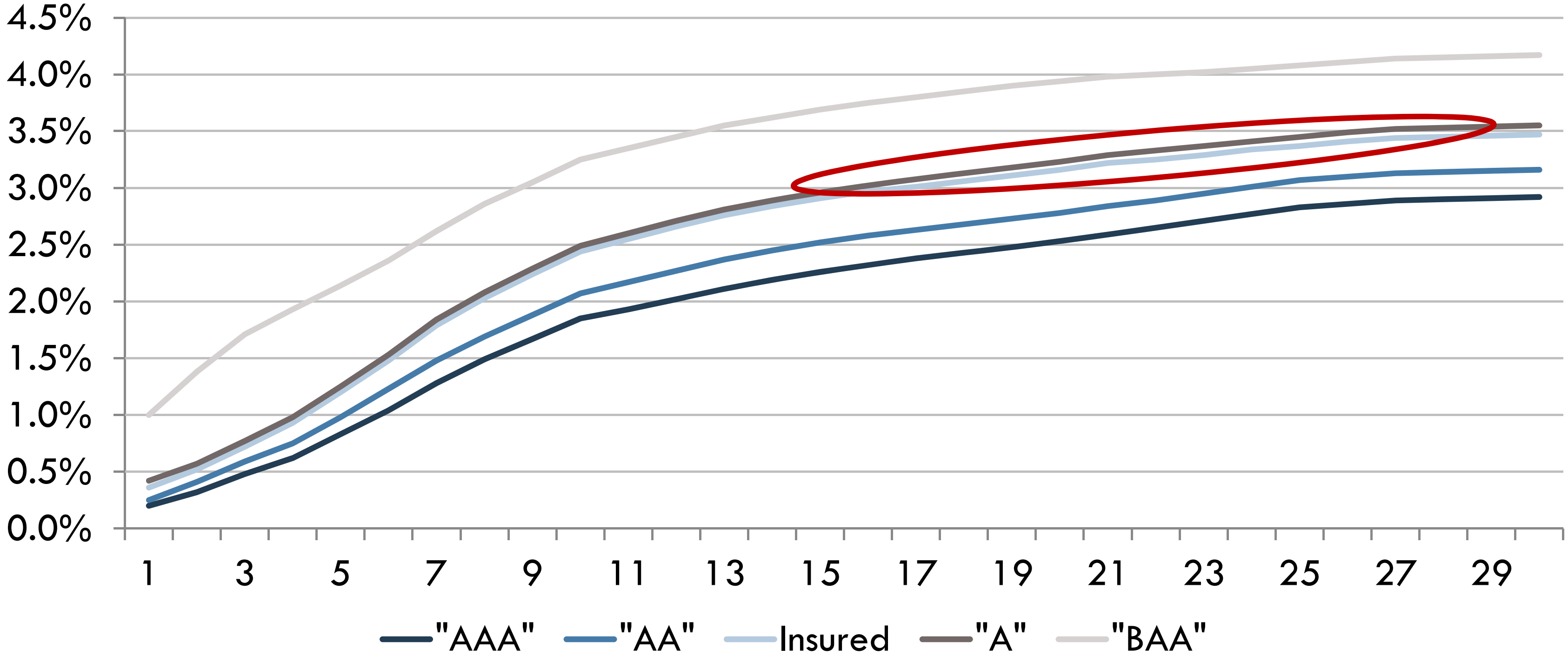
Short Term Interest Rates (As Measured by SIFMA)



Source: Securities Industry and Financial Markets Association. As of February 15, 2013.

Value of Bond Insurance Declines

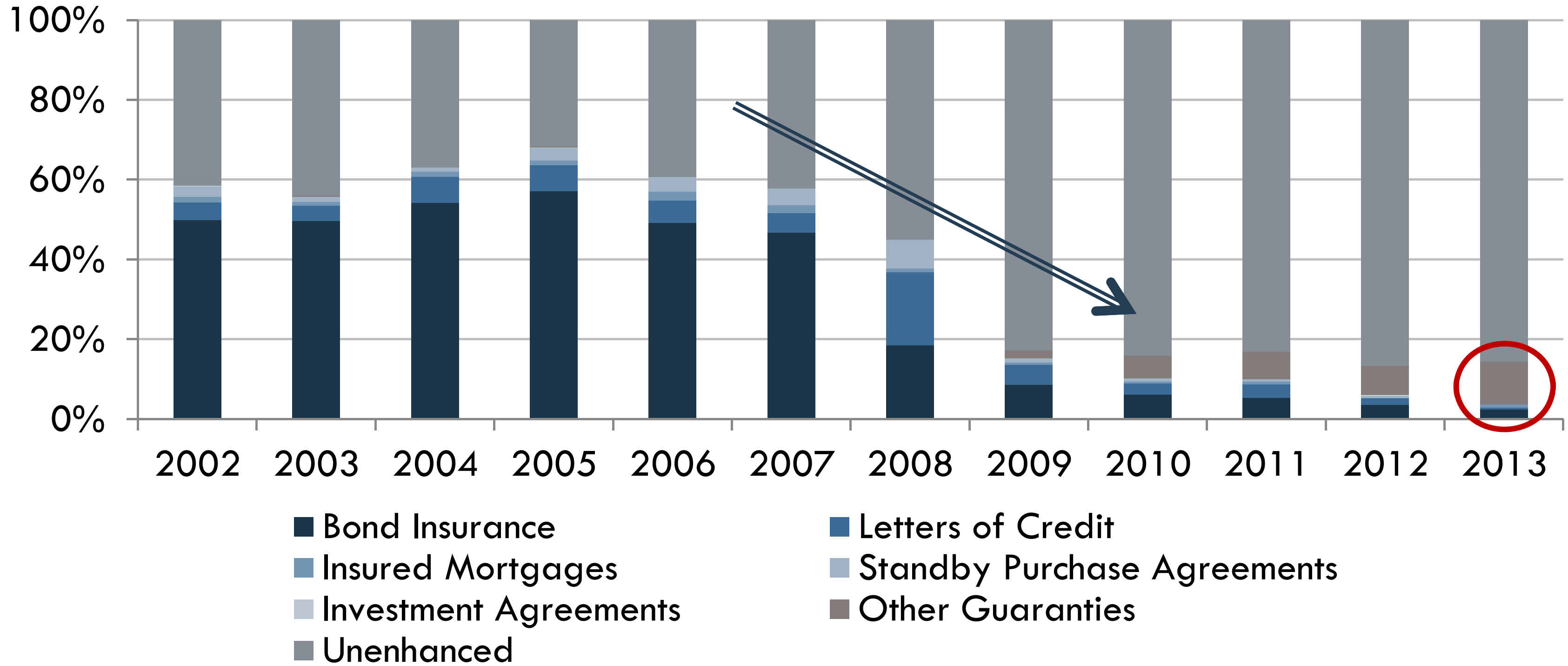
Yield Curves by Credit Ratings Today



Source: Thomson Municipal Market Monitor. As of February 15, 2013.

The Rise and Fall of Municipal Bond Insurance

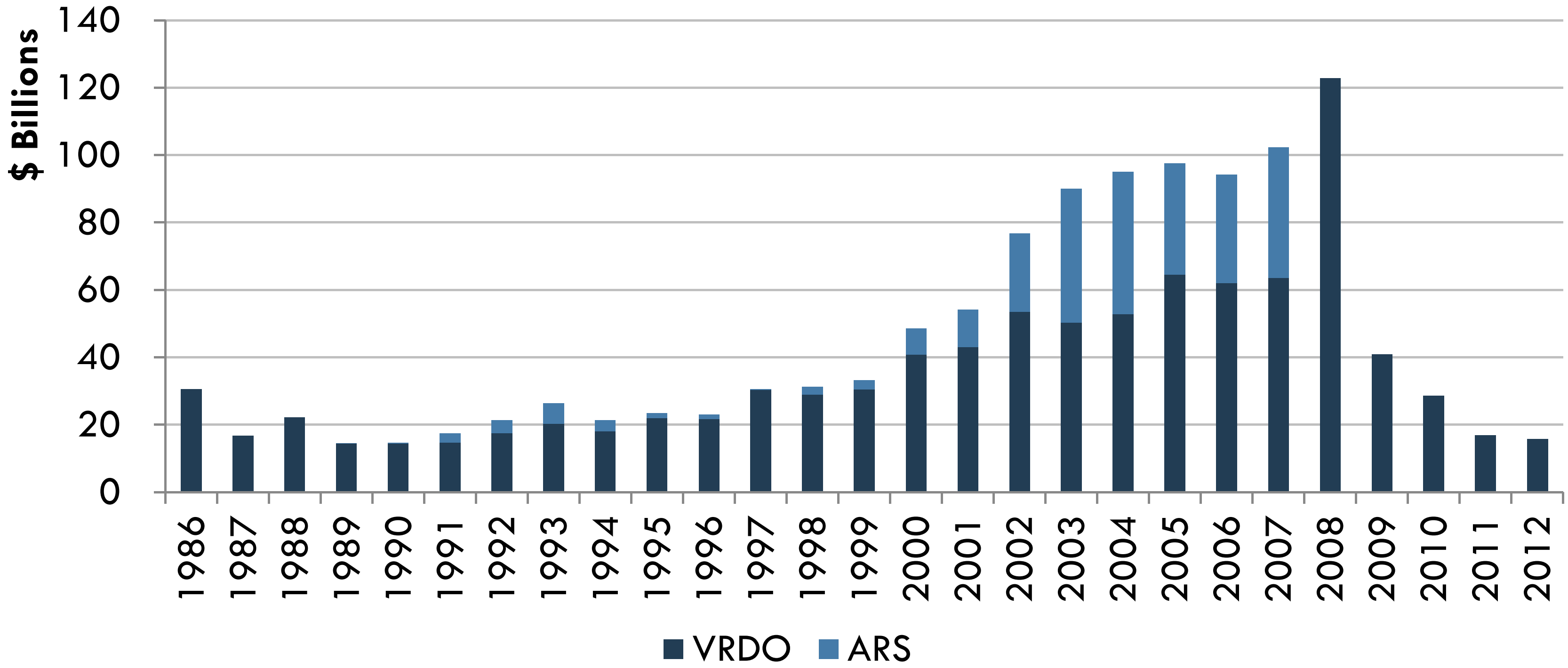
Historical Bond Issuance



Source: Bond Buyer. (Long-Term Bond Sales Based on Dollar Volume) As of February 15, 2013.

Variable Rate Product Mix and Volume Changes

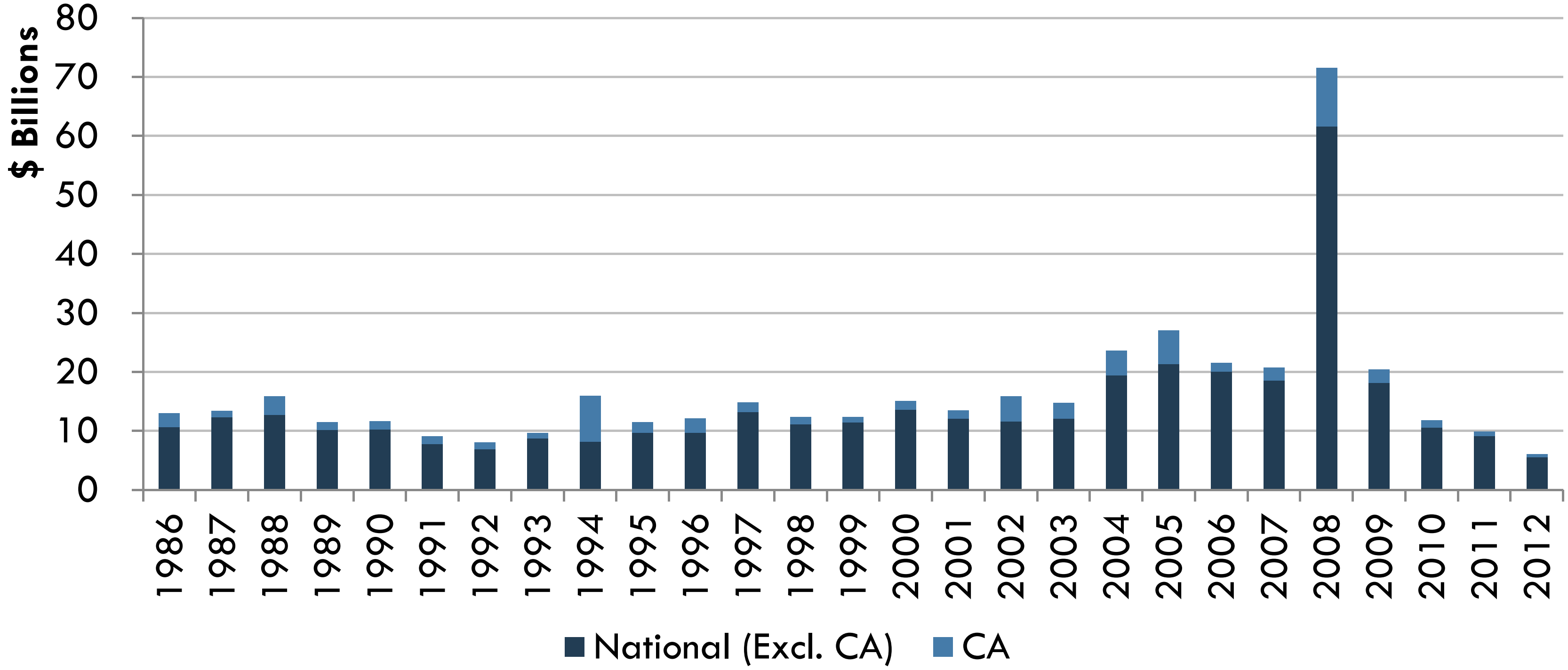
Historical Variable Rate Issuance



Source: Bond Buyer. (New Issue Bond Sales) As of February 15, 2013.

New Issue LOC Use Continues to Decline

Historical LOC Issuance



Source: Bond Buyer and Thomson Reuters SDC. (New Issue Bond Sales) As of February 15, 2013.

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OVERVIEW OF CREDIT ORIGINATION AND BANK MARKET UPDATE

Tim Self, Managing Director, JPMorgan

Agenda

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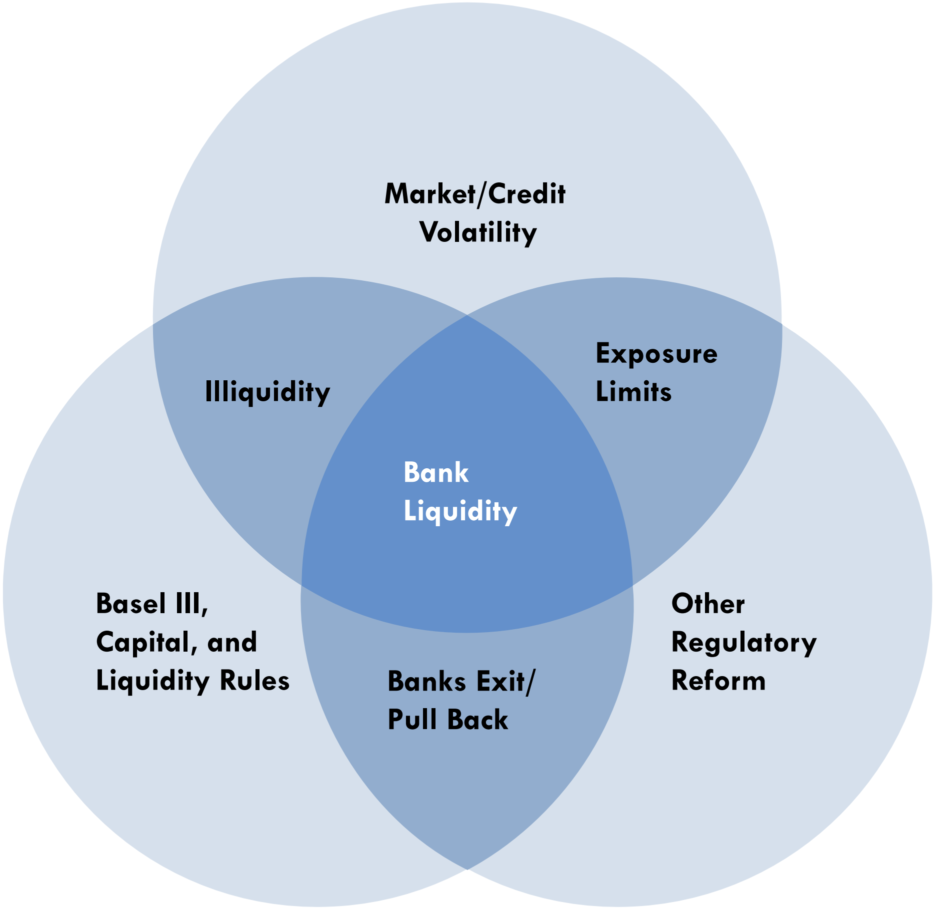
Current Conditions in the Bank Market

Current conditions

- Clients continue to focus on fortifying their balance sheet / liquidity
  - Many issuers have reduced their reliance on the credit markets by terming out debt in an interest rate friendly environment, though the spread differential between SIFMA yields and fixed rates are at or near all-time highs
  - Issuers continue to focus on diversifying their credit bank exposures
- The market has witnessed significant renewal and replacement activity, and we expect the demand for bank facilities to intensify in 2013 and 2014 as a result of the considerable volume of facility expirations over the next 18 - 24 months
  - An estimated $69.2 billion of credit facilities are up for renewal in 2013
  - $65 billion up for renewal in 2014
- Those banks that remain active may be constrained in some way:
  - Issuer concentrations
  - More limited credit appetite relative to prior cycles
  - Geographic concentrations (i.e.: California, New York)
  - Expectations for ancillary business
- Basel III & Liquidity Coverage Ratio ("LCR")

Key Factors Affecting the Bank Market



Agenda

Two Primary Forms of Facilities Providing Liquidity

Letter of Credit

- **Letter of Credit - Provides credit enhancement and liquidity support**
- **Bank must pay bondholders <u>no matter what happens</u> to issuer**
  - Bankruptcy
  - Downgrade
  - Default
- Investors focus on the bank's credit primarily
- Bonds' long-term and short term ratings reflect the bank's rating, not the issuer's (joint criteria available)
- Bank's annual fee reflects issuer's <u>rating</u>, letter of credit <u>maturity</u>, <u>size</u> of exposure
- Typically utilized by issuers rated A+ or lower, but we are seeing more Aa3's purchase LOC protection
- Customary Credit Agreement: Reimbursement Agreement
- Facility term: typically 1-3 years
- Subject to future extensions

Liquidity Facility

- **Line of Credit or Standby Bond Purchase Agreement - Provides liquidity support**
- Bank must pay bondholders in all <u>cases except:</u>
  - voluntary bankruptcy of issuer
  - issuer fails to pay principal & interest
  - issuer default on parity debt
  - involuntary bankruptcy
  - issuer's long-term rating falls below investment grade
- Investors must therefore pay attention to issuer's credit
- Higher probability of failed remarketing
- <u>Typically limited to issuers rated AA- or better</u>
- Bonds carry <u>bank's</u> short term ratings and <u>issuer's</u> long term rating
- Customary Credit Agreement - Standby Bond Purchase Agreement
- Facility term: typically 364 days to 3 years
- Subject to future extensions

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Overview

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- **Issue:**
  - Basel III proposed banking regulations are expected, through an incremental introduction of a Liquidity Coverage Ratio ("LCR"), to increase the amount of High-Quality Liquid Assets ("HQLA") that banks are required to hold to cover commitments that can come due in less than 30 days
  - As the regulations are currently proposed, credit and liquidity facilities that support variable rate demand obligations ("VRDOs") and Commercial Paper ("CP")[1] would require banks to hold additional HQLA (at a level of 30% of the outflow amount) to support these commitments that can come due in less than 30 days
  - LCR is expected to be introduced beginning on January 1, 2015 with minimum compliance being phased in through January 1, 2019, as detailed in the table below:

	1/1/2015	1/1/2016	1/1/2017	1/1/2018	1/1/2019
Minimum LCR	60%	70%	80%	90%	100%

  - The impact of these changes may include:
    - increased cost for longer dated credit / liquidity facilities
    - constrained supply of longer dated credit / liquidity facilities

Overview

- **Solution:**
  - Municipal issuers can utilize Callable Commercial Paper ("Callable Paper") to mitigate the potential impact of increased credit and liquidity facility fees and shorter tenors due to the proposed regulatory changes
  - Callable Paper will be optionally callable by the issuer on any business day beginning on the 35th calendar day prior to the effective maturity date through the effective maturity date upon two business days notice
    - This structure facilitates the issuance of new Callable Paper prior to the 30th day before the effective maturity date in order to prevent inclusion in the proposed LCR calculation and any related surcharges under a liquidity or credit facility (see additional Callable Paper program more fully described later in this section)
  - A bank providing a credit or liquidity facility on Callable Paper would generally not have to increase its holdings of HQLA and could price longer-tenor facilities under this structure more aggressively (than facilities captured under the LCR)
- **Buyer Base:**
  - Existing tax-exempt Money Market Funds ("MMF") represent a meaningful buyer base for Callable Paper

Potential Benefits of Callable Paper

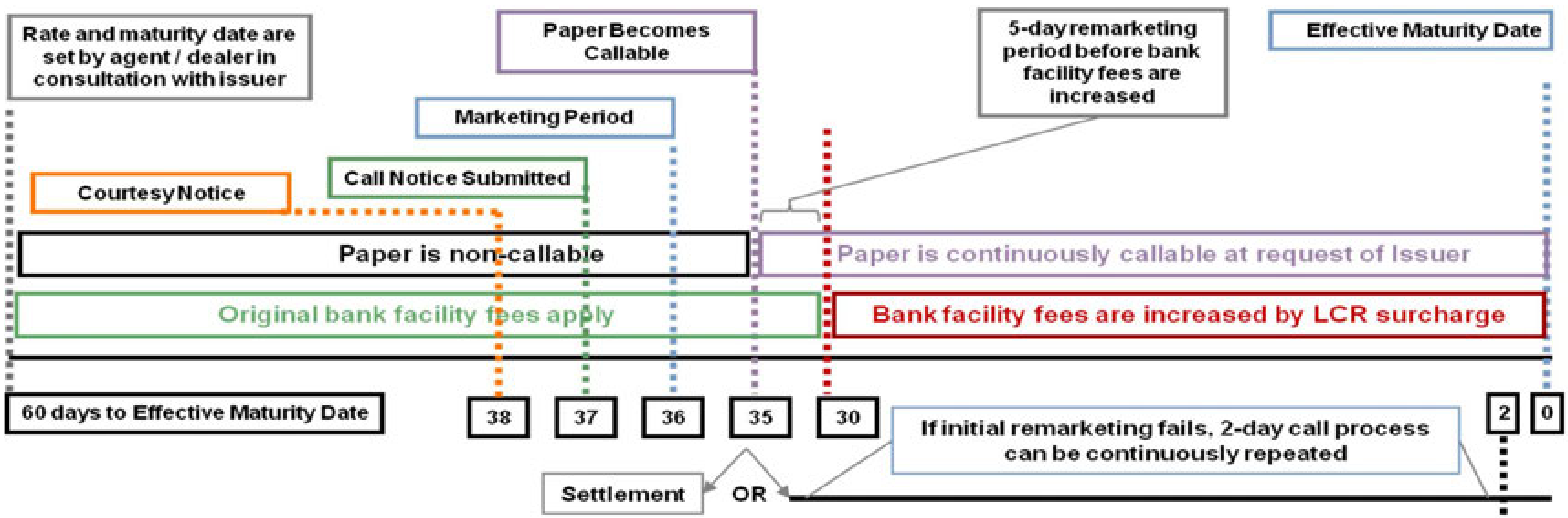
- Utilizes a familiar and established Commercial Paper ("CP") program structure
- Facilitates banks offering longer dated liquidity / credit facilities without such facilities being priced to incorporate potential LCR related costs
- Mitigates the potential impact of increased credit and liquidity fees due to proposed regulatory changes
- Provides a short-term product eligible for purchase by Money Market Funds ("MMF's")
  - Same buyer base as for traditional VRDO's and CP
- Issuer benefits from an improved maturity risk profile compared to traditional VRDOs (majority of issuance expected to be in the 60-90 day range based on investor demand, but maximum maturity would be 270 days)
- Insulates issuers from potential shorter term SIFMA volatility and introduces reset stability at rates that have traded in a very tight average range relative to SIFMA over the past 10 years
- Structure maintains traditional money market terms that exist in current liquidity and letter of credit backed transactions
- Not intended to be a J.P. Morgan specific product; possible to have broad credit bank and dealer participation
- Three Callable Paper transactions already successfully launched and paper rolled; three additional transactions mandated
- DTC procedures have been amended to facilitate next day call provisions and Bloomberg TOMS System has functionality to track Callable Paper call dates and maturities

Callable Paper Mechanics

Callable Paper Overview

- Callable Paper is similar to traditional Flex Mode and True CP and it may be rolled for up to 270 days
- Callable Paper is callable by the issuer at par starting on a business day on and after the 35th calendar day prior to the effective maturity date upon two business days notice, so that it can be remarketed or new Callable Paper may be issued prior to the 30th day before the relevant effective maturity date
- If the Callable Paper is not remarketed or new Callable Paper is not issued and there are 30 calendar days or less before the effective maturity date, bank facility fees to the issuer will increase by a surcharge of 0.75% ("LCR Surcharge") to compensate the bank for its incremental LCR related costs
  - This creates a 5-day period to call and remarket or replace the Callable Paper with paper having a longer tenor before surcharges accrue
  - Paper remains callable upon two business days notice on and after the 35th calendar day until effective maturity

Sample Timeline of Callable Paper with an Effective Maturity Date Set 60 Days After the Issuance Date



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CREDIT ENHANCEMENT: BOND INSURANCE

Suzanne Finnegan, Senior Underwriting Officer,
Build America Mutual

What is Bond Insurance?

- Form of Credit Enhancement - guarantees the scheduled repayment of principal and interest to investors on the insured bonds.
- Benefit to the municipal issuer - interest cost savings based on the higher rating of the insurer.
- Benefit to the investor – credit underwriting of issue plus higher rating of bond insurer increases security and marketability of bonds.
- Insurance Premium - paid out of the costs of issuance on a transaction. The premium is based on a variety of factors including the underlying credit quality, structure and term of the transaction and reflects a portion of the interest cost savings the issuer has received by using the insurance.

Recent History of Bond Insurance

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- In 2008, there were 8 bond insurance companies providing substantial interest cost savings to the municipal market.
- As a result of the financial crisis, by 2011 there were no companies rated Aaa/AAA and only one company remained actively insuring transactions.
- While insured penetration fell from over 50% in 2008 to only 3.5% in 2012, there is currently significant demand in the market for insurance for small to medium sized municipal issuers, particularly those that access the market less frequently.
- In July 2012, Build America Mutual became the first mutual bond insurance company with the industry's highest financial rating of AA/Stable by S&P.
- As a mutual, BAM builds financial stability every time we insure a bond.

BAM

Benefits of Bond Insurance

- Interest cost savings for municipal issuers
- Improved liquidity and transparency of individual bond issues
- Marketability of bonds to retail investors
- Certainty for investors

BAM

Insurance Companies Structures Differ

- BAM – A Mutual Company
  - Operated for the benefit of its members—the cities, states and other municipal entities—that use the financial guaranty.
  - BAM's mutual model permits its sizable capital base to grow transaction by transaction, eliminating the need to "go public" to raise capital
  - No concerns about quarterly earnings growth to satisfy equity investors

- Assured - A Stock Company
  - Increases capital in the equity markets and/or through retained earnings
  - Operated to serve two constituents - stockholders and policyholders – whose interests may not always be aligned
  - Launching a new municipal–only financial guaranty company to increase its insured penetration of the municipal market

BAM

Insurers Focus on Specific Sectors

- Competitive, negotiated and secondary market issues can be insured
- BAM – municipal only - fixed rate bonds only
  - Bond Sectors Insured
    - G.O., General Fund and Appropriation Bonds
    - Utility Revenue Bonds
    - Transportation Revenue Bonds
    - Public Colleges and Universities
    - Dedicated Tax Revenue Bonds
    - Tax increment and Special Assessment Bonds
- Assured – provides insurance of most sectors of public finance and project finance through AGM

BAM

Build America Mutual

- Key Facts
  - BAM's mission is to deliver substantial interest cost savings for issuers of municipal bonds and durable protection against loss for municipal bondholders.
  - Rated AA/Stable by S&P:
    - Started with $600 million on Day 1, with capital growing over time from Member Surplus Contributions from municipal issuers and additions to the collateral trusts securing first loss reinsurance
    - No Legacy Portfolio
  - First Loss Protection: 15% first loss reinsurance on the par amount of each policy, secured by high quality collateral held in trusts
  - Single Risk Limits: 20% of BAM qualified statutory capital for A or higher-rated bonds; 15% for BBB
  - Operating Leverage: Target operating leverage over the long term is 50-60:1.
  - Licensed in California and 34 other states and DC, with licenses are pending in the remaining states.

BAM

Build America Mutual

- Financial Advantages for Issuers

- Each of these elements of BAM membership is unique and will lower the long-term cost of public borrowing:

  - Significant interest cost savings;

  - Receive future dividends, subject to regulatory approval;

  - Reutilize the Member Surplus Contribution for the life of any refunding issue; and

  - Have the option to pay only a 10-year risk premium up front at closing and annual premiums after 10 years if bonds are not refunded.

BAM

Build America Mutual

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- Unprecedented Transparency

  - In order to allow issuers and investors in BAM-insured bonds to monitor our financial strength first-hand, each quarter BAM discloses claims-paying resources, leverage ratios, capital ratios and material information on its insured portfolio.

  - To increase liquidity and transparency of BAM-insured bonds, we publish **Obligor Disclosure Briefs (ODBs)** on every issuer insured. These ODBs are easily accessible by CUSIP, obligor, state or sector on our website (www.buildamerica.com/obligor) and are updated on an annual basis.

  - This information assists broker-dealers in meeting disclosure rules for secondary market transactions.

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INVESTOR'S PERSPECTIVE

Ronald L. Mintz, Principal-Senior Credit Analyst, Vanguard

Investor Issues

- Long Term Bonds
  - Credit enhancement is out of favor.
  - We have an analytical team capable of evaluating the credit risks.
  - We have a trading staff capable of evaluating the market variables.
  - We'd rather capture that value for our shareholders rather than enriching the bond insurers.
  - That said, if we own insured bonds and they default, we will take the insurers' money!

Investor Issues

Short Term Bonds

- Letters of Credit.
  - Substitute the credit of the issuer for the credit of the bank.
  - The bank also provides liquidity for the bonds if we choose to put them.
  - The credit work on the underlying obligor is less critical.
- Liquidity Facilities/Standby Bond Purchase Agreements.
  - The bank only provides liquidity.
  - It can terminate the liquidity facility under certain circumstances related to a significant credit deterioration of the issuer.
    - Defaults/Bankruptcy.
    - Ratings downgrades below investment grade.
    - The termination events must be remote and monitorable.
  - We do the same credit work on the underlying obligor as we would do for a long term bond issue.

Investor Issues

Rule 2a-7: Timing

- Credit enhancement is required in the short term market because of SEC Rule 2a-7 that governs money market funds, the primary investor base for these securities.
- Rule 2a-7 mandates a maximum maturity of 397 days.
- LCs and liquidity facilities allow the bonds with a long stated maturity to be shortened to the put period.
  - Weeklies and dailies are most common.
  - For CP, it is the rollover date, that by definition is within 270 days.

Investor Issues

- Rule 2a-7: "Minimal Credit Risk"
  - The analyst has to determine that a security held in a 2a-7 regulated money market fund poses minimal credit risk, though this is not defined.
  - There are ratings requirements, generally in the AA category or higher.
  - For LCs, the credit risk is based on the bank.
    - At Vanguard, the bank analyst makes the determination.
    - The muni analyst looks at the structural and tax issues.
  - For liquidity facilities, minimal credit risk is based on the obligor.
    - At Vanguard, the muni analyst who looks at the credit makes the determination.

Investor Issues

- Rule 2a-7: Ratings
  - There are tests based on the short term ratings: they must be in the top two categories to be eligible to be held in a money market fund.
    - 2 of 3; 2 of 2; 1 of 1.
    - Fitch/S&P vs. Moody's.
    - At Vanguard, we usually only buy securities in the top category.
  - Long Term ratings are not a factor although there is usually a high correlation between the long term rating and the short term rating.

Investor Issues

- Disclosure Issues.
  - For LCs, there are minimal issues.
  - For liquidity facilities, there is a conflict between Rules 2a-7 and 15c-2(12) with respect to ongoing disclosure.
  - For liquidity facilities, it is crucial that investors be informed if there is an immediate termination event.
    - Being informed does not impact the termination itself, but they are no longer eligible to be held in a money market fund and we need to:
      - Price them properly; and
      - Move them out.
    - Many documents have multiple notice parties, but they do not include the investors—who own the bonds!
      - We try to change that when we see it.
  - To make an escrowed security money market eligible, we need to review the escrow documents, so please post them to EMMA (even though MSRB rules do not require this).

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Credit Enhancement Ratings

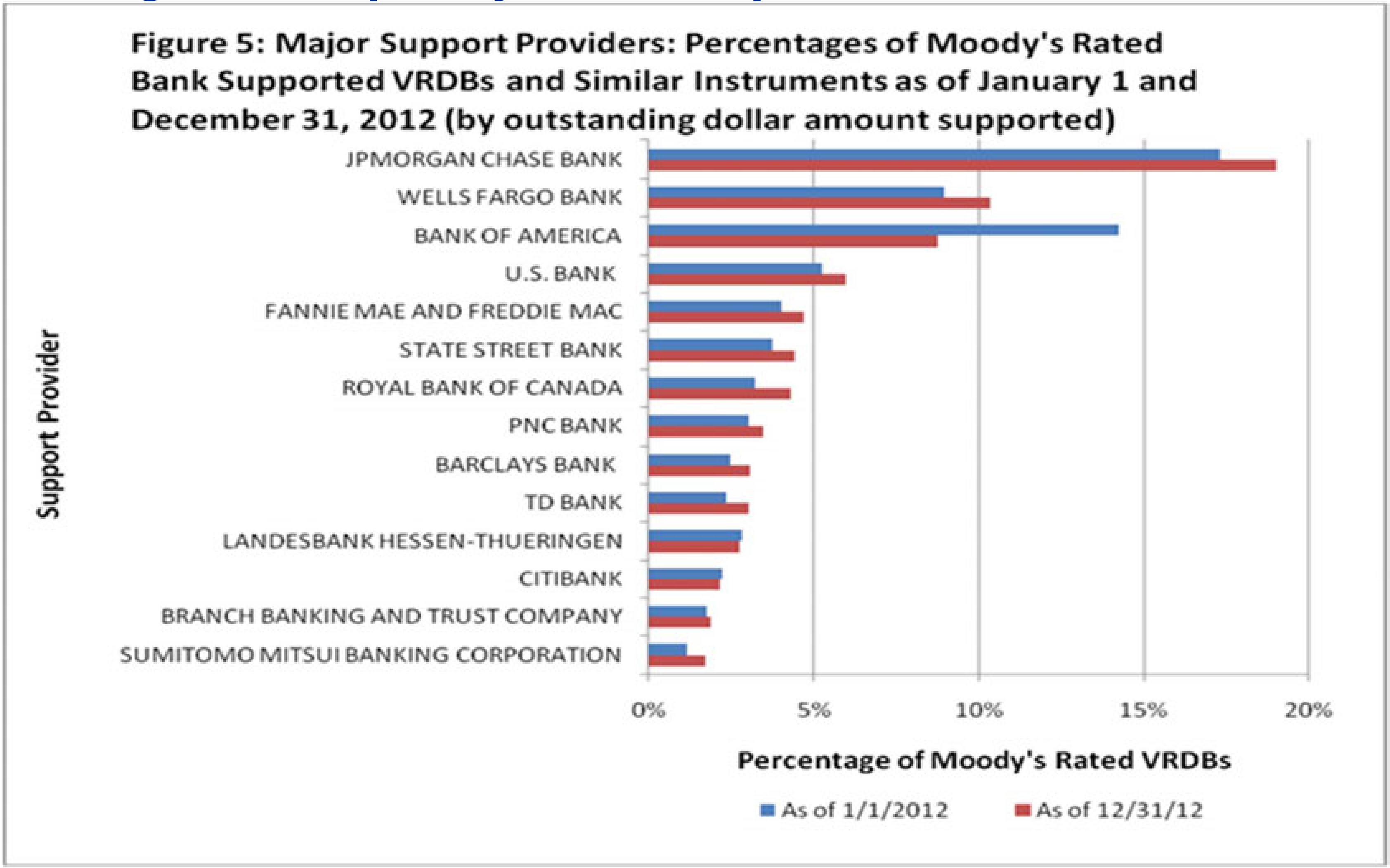
Joann Hempel, Vice President/ Senior Credit Officer

March 6, 2013

Typical Credit Enhanced Ratings

- Letter of credit transactions which support an unrated borrower will follow both the long and short-term ratings of the bank
- Letter of credit transactions which support a rated borrower can receive a higher long-term rating based on joint default analysis; short-term rating follows the bank
- Transactions with standby bond purchase agreements:
  - The long-term rating follows the borrower
  - The short-term rating is based upon the short-term rating of the bank *and* the likelihood of early termination of the SBPA due to an automatic termination event
- Self liquidity deals follow the long and short-term rating of the borrower; short-term rating is based upon coverage of daily assets to short-term liabilities, internal procedures and other qualitative measures
- Insured deals long-term ratings follow the higher of the rated issuer and the financial guarantor

Changes in Liquidity Landscape



Bank Ratings – Top 7

Bank	Long-term rating	Short-term rating
JPMorgan Chase Bank, N.A.	Aa3	P-1
Wells Fargo Bank, N.A.	Aa3	P-1
Bank of America, N.A.	A3	P-2
U.S. Bank, N.A.	Aa3	P-1
Fannie Mae & Freddie Mac	Aaa	P-1
State Street Bank	Aa2	P-1
Royal Bank of Canada	Aa3	P-1

Key observations from 2012

- » Moody's downgraded a number of banks active in providing credit enhancement to the municipal market
- » 2012 high volume of support facility expirations were successfully resolved through extensions, substitutions or refinancing with direct bank loans, floating rate notes or fixed rate bonds
- » Changes in outstanding balances by banks; the top 5 bank facility providers comprise half the VRDB market
- » Increase in the use of direct loans and other indexed structures
- » Reduced exposure to European banks
- » Majority of support providers are North American banks
- » Support provided by Asian banks nearly doubled over the past year, although a small percentage of the Moody's rated VRDBs

Re-Evaluation of Risks by Issuers

Risks inherent in VRDBs include:

» Bank counterparty exposure

» Refinancing/Support Facility rollover exposure

» Rate reset exposure

Issuers have mitigated risks by

» Pro-actively replacing support providers shifting away from
  - Lower rated banks and
  - European banks

» Matching floating rate debt to floating rate income streams

» Relying more heavily on fixed rate debt

» Converting VRDBs to direct loans from banks

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QUESTIONS AND ANSWERS

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