Securitized Products Special Topics

Crypto Collateral: Expect Robust Par Value Tests

Cryptocurrency in Securitized Pools Spotlights OC Test Blueprints

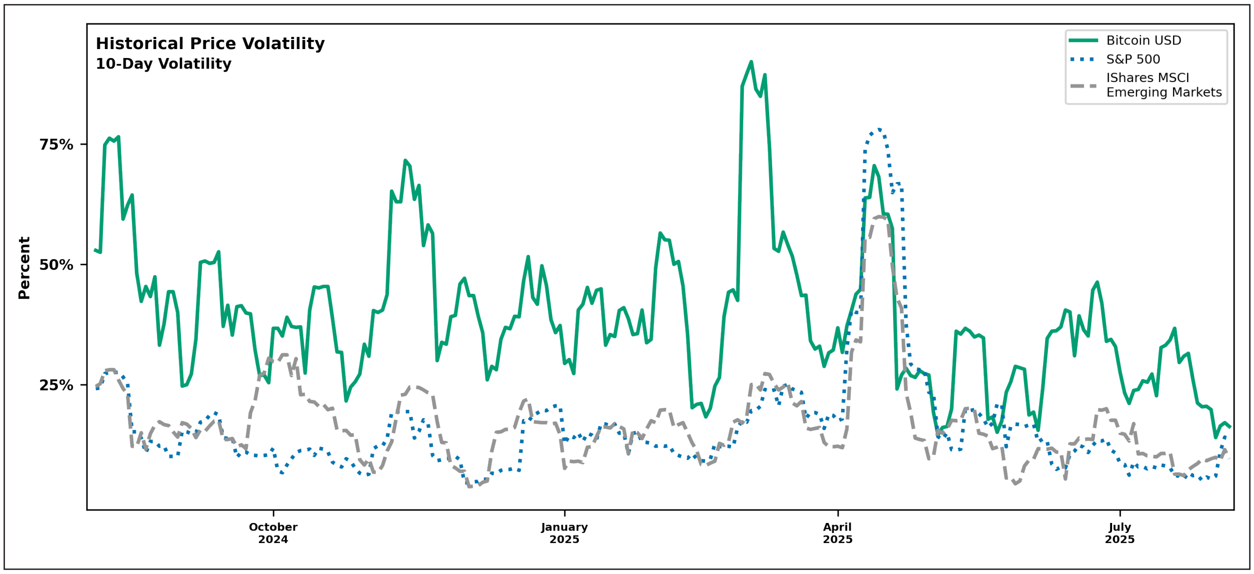
Stav Gaon
+1 (646) 768-9173
sgaon@academysecurities.com

Headquarters Address:
Academy Securities, Inc.
622 Third Avenue, 12th Fl
New York, NY 10017

Crypto-related collateral gradually makes its way into securitization pools. Robust coverage/overcollateralization tests will be a key structural feature, amid the elevated volatility of digital coins. Recent developments strongly suggest cryptocurrency gets closer to back securitized deals, or to affect underwriting parameters of existing securitization collateral, such as mortgages or personal loans. The House has cleared three digital asset bills, as widely reported. The Senate is considering market structure legislation that would set up a regulatory regime for digital asset investments and exchanges. In turn, the FHFA ordered Fannie Mae and Freddie Mac to consider cryptocurrency as an asset in single-family mortgage risk assessments. In the private space, firms originating loans with cryptocurrency collateral reportedly are lining up crypto-backed securitization deals.

Crypto Bitcoin benchmark volatility subsided just a bit in 2025. In a couple short turbulence periods, Bitcoin was even calmer than US stocks (Figure 1). But crypto clearly remains a very volatile asset class. This does not necessarily render it unfit for collateral pools or loan risk assessments. But potentially rapid and extreme value fluctuations underscore the focus on structural protections.

Figure 1. Bitcoin vs. Equities Volatility

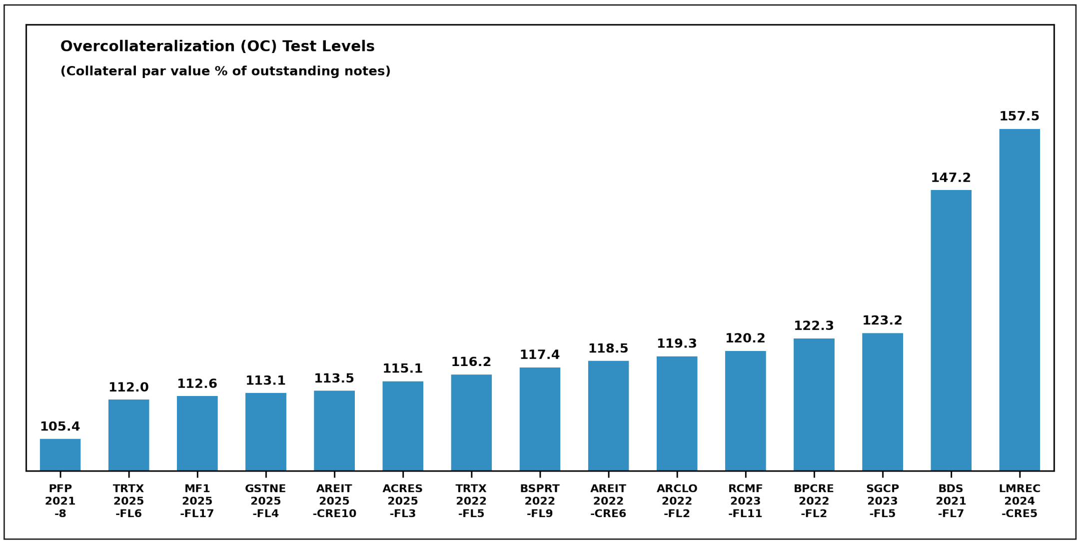


Source: Bloomberg and Academy Securities

OC Calculation Nuances Address Valuation Volatility

Well-established par value tests (aka overcollateralization, or OC tests) in CRE CLO and corporate CLO deals, among other securitized segments, provide blueprints for crypto-driven note protections. Generally, par value tests estimate the ratio of the principal balance of the collateral to the principal balance of outstanding notes. If the ratio falls below a pre-defined threshold, cashflow diversion and other protective measures kick in, until the breach is cured. OC test thresholds can widely vary. For example, across CRE CLO deals we see OC breach levels range from 105.4% all the way to 157.5% (Figure 2).

Figure 2. CRE CLO Par Value Test Thresholds



Source: Deal documents and Academy Securities

Nuanced calculations of the so-called "net outstanding portfolio balance", the numerator of the OC test ratio, are a critical part of the test ability to address collateral value deterioration. The calculation typically starts with summing the deal's cash and the balance of all assets and investments. The calculation of the deal's assets value then adjusts the collateral's par value based on several risk buckets.

For example, in corporate CLO, if the deal accumulates triple-C rated exposures above a certain threshold (e.g. 7.5%), the excess exposure should be calculated at market price, or assumed recovery levels, instead of par.[1] Other risk buckets include defaulted obligations. Deals may have defaulted obligations thresholds ranging from 2.5% to 7.5%. Higher thresholds delay the application of haircuts and provide less protection to senior bonds.

In turn, in CRE CLO deals the OC numerator calculation will apply a discount to any modified or defaulted loans, to penalize for their decreased credit quality. Modified loans will consider any appraisal reductions in calculating their outstanding value. The valuation of defaulted loans will incorporate various punitive measures, including discount factors (or corresponding "recovery rates") that can vary by property type.

1 "OC Triggers: Subtle Thresholds Come to the Fore As Collateral Distress Builds Up," Securitized Products Special Topics, Academy Securities, April 4, 2023

Crypto Lending Practices Point to Upcoming Deal Provisions

The application of OC tests to crypto collateral will include aspects such as:

1. Definitions of crypto-specific risk buckets that drive the OC test numerator calculation
2. Consequences of test breaches

Crypto lending firms appear to have established some practices that could inform OC test calculations in upcoming securitization deals that feature crypto collateral. The lending firms clearly acknowledge cryptocurrency volatility. As such, crypto loan and mortgage products incorporate LTV-based margin call provisions. If LTV falls below a certain threshold, such as 35%, the crypto lender issues a margin call, asking for more collateral. If the value drops further, say below 30%, the lender may liquidate the cryptocurrency collateral and convert it to cash.

Lenders also accept a limited number of digital coins as collateral. For example, we see one lender accepting only Bitcoin and Ethereum. The recent FHFA cryptocurrency order to Fannie and Freddie also limits coin eligibility for mortgage risk assessments. The GSEs could consider only cryptocurrencies that can be stored on a US-regulated centralized exchange that's subject to all applicable laws.

The generic crypto lending provisions and eligible collateral types we see can have the following implications for OC test calculations:

- **Volatility-driven risk buckets.** The value of various digital coins can be discounted based on their historical volatility. As such, more volatile coins will decrease the OC numerator value, thereby triggering breaches more quickly. Tellingly, the FHFA order also directs the GSEs to consider market volatility adjustments in cryptocurrency risk assessments. Volatility-based approach that categorizes digital coins to different risk buckets echoes a similar approach for property types in CRE CLO OC tests. Property types that historically have been more volatile, such as hotels, require more punitive discounts, compared to properties that have been more stable, such as multifamily. Specifically, industrial, multifamily and anchored retail properties require 40% discount. Office, self-storage and unanchored retail properties have 45% discount. Hospitality and healthcare properties carry 55% discount. All other property types have 60% discount.[2]
- **Breach-driven liquidations.** Crypto OC test breaches can lead to cash diversions across the capital structure, as is typical in CRE CLO and CLO deals. CRE CLOs usually have one OC test for the entire deal. Corporate CLOs can have multiple OC tests, one for each class. The tests become more onerous for more senior classes. For crypto collateral, OC test breaches could also require posting of additional collateral. Persistent breaches could result in liquidation of the crypto collateral, and conversion to cash, echoing crypto lending practices. Interestingly, despite cryptocurrency's high volatility, one crypto lender states it has yet to issue any margin calls after a few years of lending.

2 The discounts are formally part of the "Moody's Recovery Rate" that deals use to apply valuation discounts to defaulted loans.

Academy Securitized Products Research Reports

Securitized Products Special Topics - Esoteric ABS:

Utility Rates: Rising Bills Can Bolster RRB Deals

Energy Transition: Expect Broader Definitions in Securitization Laws

Power Costs: Data Centers and Recovery Bonds Poised for More Predicatability

Sports Securitization: Vet League Revenues and Stadium Cashflows

Timeshare ABS: Program-specific Attributes to Drive Performance

Music ABS: Pool Variations Emerge Amid Constructive Sector View

Tower ABS: Tenant Preferences Bode Well for Leasing Demand

Aircraft ABS: Momentum Builds for Insurance Booster

Data Centers: Tenant Rosters Poised to Change

Container ABS: Geopolitical Tailwinds as Issuance Picks Up

Gas Securitization: Shorter WAL Alternative to Electric Charge Deals

Net Leases: Scarcity Value as Issuance Poised to Pick Up

Recovery Bonds: Deal Reporting Shows True-Up Adjustments Potency

Data Centers: Performance Wrinkles to Test Operators' Role

Recovery Bonds: Diversifying Exposure Moves Beyond Disasters

Device Payment ABS: Expect Stable Performance as Collateral Evolves

Aircraft ABS: Waterfalls Playing Catch-Up as Fundamentals Recover

Data Centers: Teakeaways from 2023-Vintage Deals

Litigation ABS: Tailwinds in Place for an Uncorrelated Segment

Equipment ABS: Pick Your Spots Amid Diverging Collateral Trends

Commercial Solar ABS: Emergent Segment to Alleviate Headline Risks

Cell Towers: Lender-Friendly Features Dovetail with Secular Tailwinds

Timeshare ABS: Exposure to Favorable Hospitality Segments

Recovery Bonds: No Need to Closely Watch the Fed or the Economy Here

Data Centers: A Strong Segment Juggles ABS and CMBS

Securitized Products Special Topics:

BBnB: Check Your Booked-But-not-Billed Data Center Exposure

Stadium Finance: Shift to Private Funding Sets Stage for Securitization

Early Terminations: Tenant-friendly Provisions to Move Up Data Center Rollovers

Life Sciences: Surveil Your Exposure as Distress Percolates

CRE CLO Liquidations: Losses Accumulate, but No Immediate Writedowns

Office Contractions: New Term Rollover Risk, and Swelling Reserves

Multifamily Expenses: Broad Increases Mask the Fluctuations

Small Balance Commercial: Periphery Locations and “Weak” Sponsors May Prove Supportive

Investor Non-QM: Pockets of Value as Underwriting Tightens

Multifamily Prepays: Becoming Less Common, as Property Sales Drop

CRE CLO Mods: Rising Volume Not Immediately Telegraphing Distress

Agency Floaters: Adjusting Interest Rate Cap Escrows

Multifamily CRT: Limited Credit Risk on Synthetic Exposures

OC Triggers: Subtle Thresholds Come to the Fore As Collateral Stress Builds Up

Self Storage: Aspects to Watch as Performance Decelerates

Transitional Multifamily: Collateral Migration Away from CRE CLO Offers Different Deal Profile

Affordable Mortgages: Fee Elimination Spotlights Convexity Profile

Investor Non-QM: Rental Exposure with Some Structural Twists

Small Balance Multifamily: Value Ahead of Slow Prepays

Future Funding: Potential Key Performance Driver as CRE CLO Pipeline Builds Up

Multifamily Prepays: Property Sales Trigger Paydowns

Manufactured Housing: Resilient Segment Amid Potential Multifamily Softness

Tender Offers: Expect More to Come, Though Not on a Predictable Schedule

NYC Multifamily: Rent Increases to Support Cashflows Amid Regulatory Restrictions

Housing at a Crossroads: Single-family and Multifamily Exposures

Senior Housing: Focus on Segment Selection Amid Pandemic Impact

Disaster Performance: Pandemic Forbearance Resolutions Bode Well for Future Stresses

Russian Sanctions Impact: Lease Terminations and Forced Property Sales

CMBS Credit Focus:

Distressed Office: 522 Fifth Avenue Trade Illustrates Office Upside

BOLT: Liquidation Confirms Priority of Shortfalls Recovery

Office Receiverships: Gauge the Value of Changing Management

Litigation Holdbacks: Long Gone Loans Keep Haunting Trusts

Privileged Appraisals: Surprise ARA Jumps Baffle Investors

Office Re-defaults: Foreclosures to the Fore as Modified Maturities Near

Interest Adjustments: Track Shortfalls Repayment and Priority

New Leases: Track Post-Issuance Replacement Tenants

Property Protection Advances: Track Opaque Expenses in Long Workouts

Parkmerced: Abundance of Structural Angles to Determine Bond Cashflows

Pro-rata Prepays: Surprise Booster for Subordinate Bonds

PILOT: Check Another Wrinkle of Ground Leases

Non-Trust Debt: Check the Seniority of Your CMBS Collateral

Recovering Shortfalls: Credit IO Value in Distressed Office

Releasing Holdbacks: RENT is Writing Up Bonds

Reserves vs Advances: Servicers Tap Reserves to Lower Advances

Forward Forbearances: One Market Plaza Introduces a Twist to Mods

Loan Assumptions: Watch Waterfalls as New Borrowers Redevelop

Holdbacks: RENT in the Limelight, as Other Cases Brewing

Blanket NRAs: Shutting Down Advances Upends Credit IO Trades

Credit 2024: Workout Nuances Come to the Fore

Recovering the Non-Recoverable: Liquidation Nuance Bolsters Paydowns

Special Servicer Replacements: 1740 Broadway Crystalizes Implications

Crossgates Liquidation: Holdbacks Complicate Severity Projections

WODRA: Bond Cashflows Under Stress in Post-Mod Advance Recovery

Securitized Mezz: Workout Dynamics in Public Display

Dark Triggers: Nuances in Focus as Tenant Departures and Subleasing Pick Up

Upping Appraisals: Recovering Valuations Reverse Shortfalls

Non-Recoverable Advances: Unveiling a Rationale for a Key Decision

Excess Cash Allocations: Probing Advances on Positive Cashflowing Loans

Release Prices: Cherry Picking Across Office Portfolios, Sometimes at a Discount

Mezz Loan Sales: A Potential Headache for CMBS Workouts

Equity Pledges: Hotel Bossert Spotlights Dual Collateralized Loans

The Road to Conversion: Consider Office Ground Leases and ARD Loans

Credit 2023: Advancing and Workout Approaches to Play a Central Role

Hotel Receiverships: Palmer House Hilton Spotlights Stabilization Efforts

Office Modifications: 285 Madison May Offer a Blueprint for More to Come

Triple-A Shortfalls: Destiny Spotlights Delayed ASERs Impact

Inflation-Resistant Leases: Rent Steps Offer Some Revenue Protection, though Not Much

Industrial Delinquencies: Don’t Happen Often, but Watch Closely When They Do

Hotel Reserves: Key Performance Driver after Pandemic-Driven Depletion

Government Tenants: Short Termination Notices and Specialized Properties

Mall Foreclosures: What to Track as Servicers May Shift Away from Modifications

Disclaimer

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by Academy Securities for any purpose including buying, selling, or holding any security. Views and opinions are current as of the date of this presentation and may be subject to change, they should not be construed as investment advice.

This information discusses general market activity, industry or sector trends, or other broad-based business, economic, market or political conditions and should not be construed as operational, research or investment advice. This material has been prepared by Academy Securities and is not financial research nor a product of Academy Securities. It was not prepared in compliance with applicable provisions of law designed to promote the independence of financial analysis and is not subject to a prohibition on trading following the distribution of financial research. The views and opinions expressed may differ from those of Academy Securities. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and Academy Securities has no obligation to provide any updates or changes.

Economic and market forecasts presented herein reflect a series of assumptions and judgments as of the date of this presentation and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, these forecasts should be viewed as merely representative of a broad range of possible outcomes. These forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. Academy Securities has no obligation to provide updates or changes to these forecasts. Case studies and examples are for illustrative purposes only.

Index Benchmarks

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, as applicable, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein. The exclusion of “failed” or closed hedge funds may mean that each index overstates the performance of hedge funds generally.

THIS MATERIAL DOES NOT CONSTITUTE AN OFFER OR SOLICITATION IN ANY JURISDICTION WHERE OR TO ANY PERSON TO WHOM IT WOULD BE UNAUTHORIZED OR UNLAWFUL TO DO SO.