

Structured Products Briefing

July 23, 2020 | Phil Gioia, CFA



Economic Summary

Risk assets broadly rallied in the second quarter as global economies began to reopen amid the COVID-19 pandemic. Throughout the quarter, global central banks and governments enacted unprecedented accommodative fiscal and monetary policies in an attempt to counter the economic damage of the pandemic shutdowns. Rising hopes for a vaccine and the occasional upbeat economic data print added to the optimism. Despite the risk rally, COVID-19 continued to give investors pause following a resurgence in cases across the U.S. since mid-June. As of July 22, there were more than 15 million confirmed global COVID-19 cases while the U.S. had nearly four million cases and 143,495 confirmed deaths, representing nearly 25% of the confirmed global deaths¹. (Figure 1)

COVID-19 Global Cases and Deaths | July 22, 2020

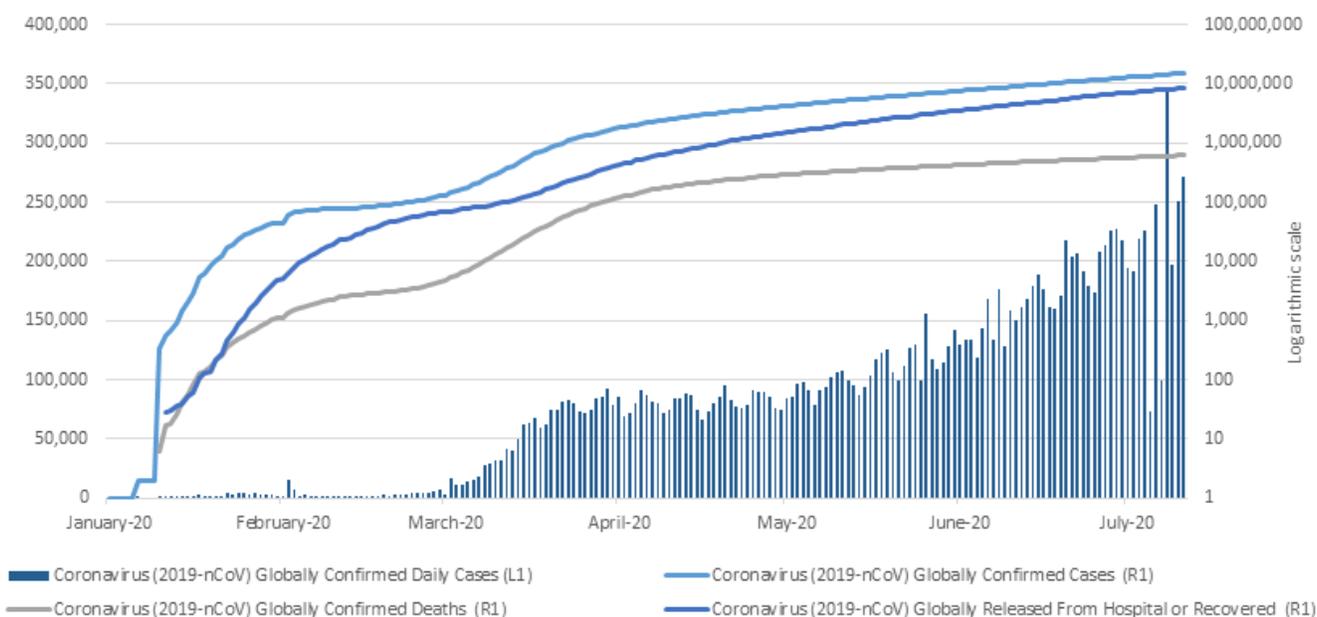
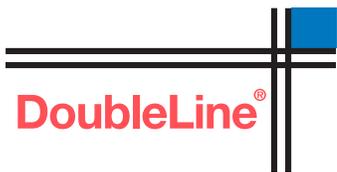


Figure 1
Source: DoubleLine, Bloomberg

A large part of the additional monetary policy occurred when the Federal Reserve introduced its \$2.3 trillion “big bazooka” on April 9. This support by the Fed included: the Main Street Lending Program, Municipal Liquidity Facility and Paycheck Protection Program (PPP), and size increases to the Term Asset-Backed Securities Loan Facility (TALF) and the two corporate credit facilities. The Primary Market Corporate Credit Facility (PMCCF) began operations on June 29 while the Secondary Market Corporate Credit Facility (SMCCF) did not begin purchasing eligible exchange-traded funds (ETFs) until May 12 and individual corporate bonds on June 16. As of July 1, none of the PMCCF had been utilized while only a fraction of the overall lending capacity of the SMCCF had been utilized, amounting to \$7.1 billion out of a total \$750 billion for both facilities. TALF began taking subscriptions on June 17, but much like the SMCCF, its overall subscription amount was a fraction of its overall capacity.

¹Source: Centers for Disease Control and Prevention



Structured Products Briefing

July 23, 2020

As of July 6, there had been approximately \$975 million in TALF subscriptions; small-business loans comprised roughly 50% of the total subscriptions while commercial mortgage-backed securities (CMBS) accounted for 38%. Despite the various lending facilities' restrained appetite thus far, the Fed's balance sheet continued to expand during the quarter in the form of asset purchases known as quantitative easing (QE) 4. Since the Fed first announced its various tools for monetary stimulus in March, its balance sheet has grown by \$2.77 trillion, larger than all previous QE programs combined. (Figure 2)

Quantitative Easing in Perspective | Fed Balance Sheet Change During QE

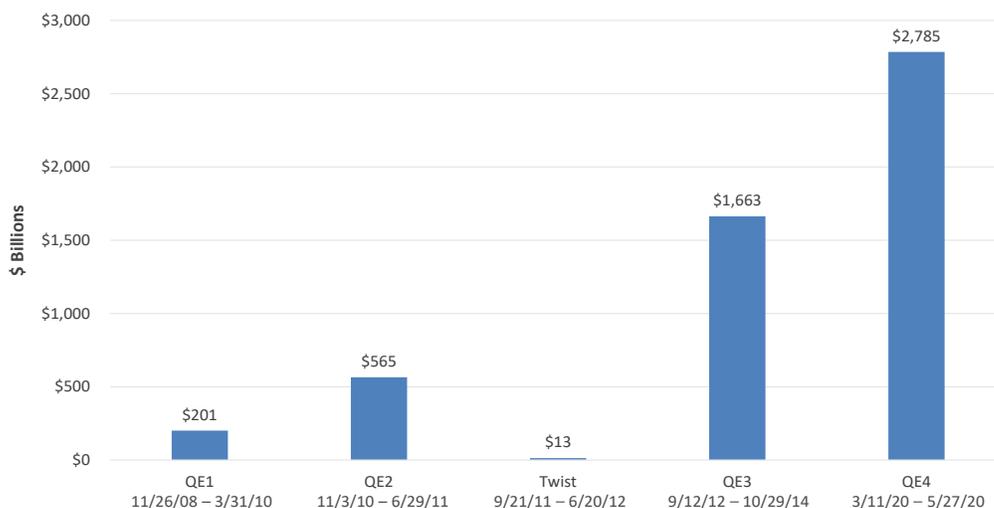


Figure 2

Source: DoubleLine, Bloomberg

For the week ended July 18, initial jobless claims were approximately 1.4 million, an increase of 109,000 from the previous week's revised level and the first weekly increase since March 27. Continuing jobless claims for the week ended July 11 remained elevated at 16.2 million. For the week ended July 4, there were 13.2 million individuals claiming Pandemic Unemployment Assistance (PUA). The total persons claiming unemployment insurance benefits across all programs was nearly 32 million as of July 4. (Figure 3)

U.S. Unemployment Data | November 2019 through July 2020

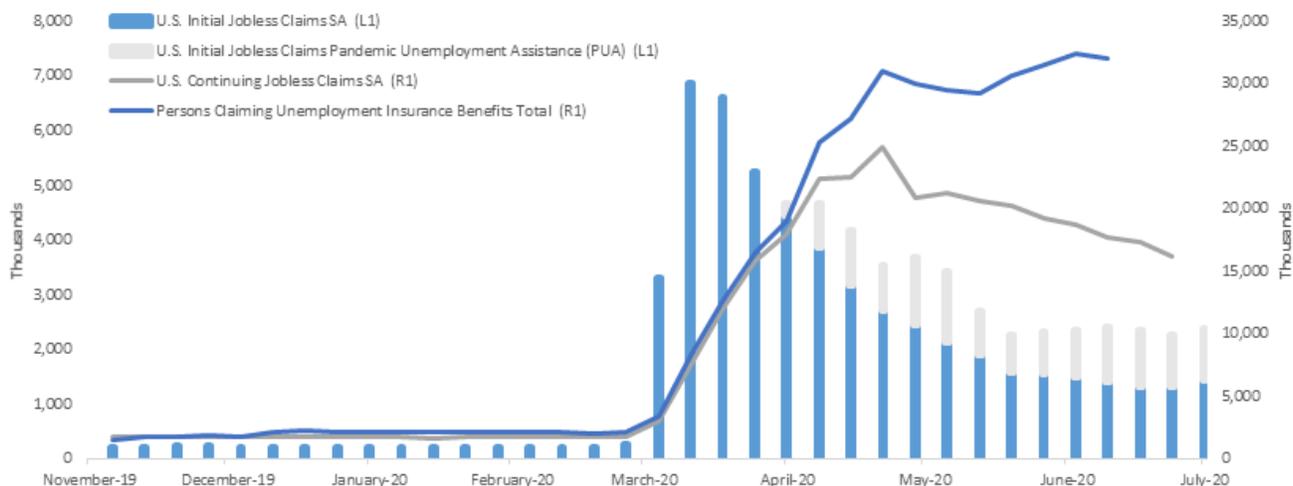


Figure 3

Source: DoubleLine, Bloomberg

2Q20 Fixed Income Review

U.S. fixed income markets generally rallied during the quarter, largely led by lower-tiered credit. For the quarter, the Bloomberg Barclays US Aggregate Bond Index (the Agg) returned 2.90%, led by investment grade corporate bonds. Against a backdrop of relatively muted interest rate volatility, broad Fed support and tightening credit spreads, the corporate credit component of the Agg, the Bloomberg Barclays US Corporate Index, returned 8.98% in the quarter, its best quarterly return since the second quarter of 1985. Year-to-date (YTD) through June 30, the Agg returned 6.14%, marking its second-best first-half performance since its 1986 inception. (Figure 4)

Returns of the Bloomberg Barclays U.S. Aggregate Bond Index and Index Components

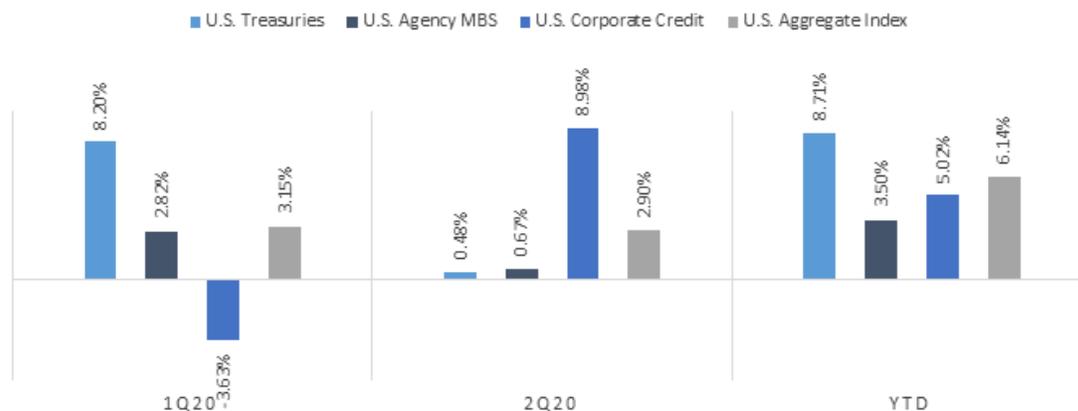


Figure 4
Source: Bloomberg, DoubleLine

Although parts of the securitized credit market have remained largely unaddressed by various Fed programs, many securitized sectors experienced a strong recovery during the second quarter of 2020. The Markit iBoxx Broad U.S. Non-Agency Residential Mortgage-Backed Securities (RMBS) Index returned 15.16% while the ICE Bank of America (BoFA) Fixed Rate CMBS Index returned 4.50%. The ICE BoFA AA-BBB Fixed Rate Asset-Backed Securities (ABS) Index returned 9.14% while senior-rated tranches of collateralized loan obligations (CLOs) returned low to mid-single digits. Emerging markets (EM) fixed income also participated in the recovery as the J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified returned 11.21% for the quarter. (Figure 5)

2Q20 Fixed Income Sector Returns | June 30, 2020

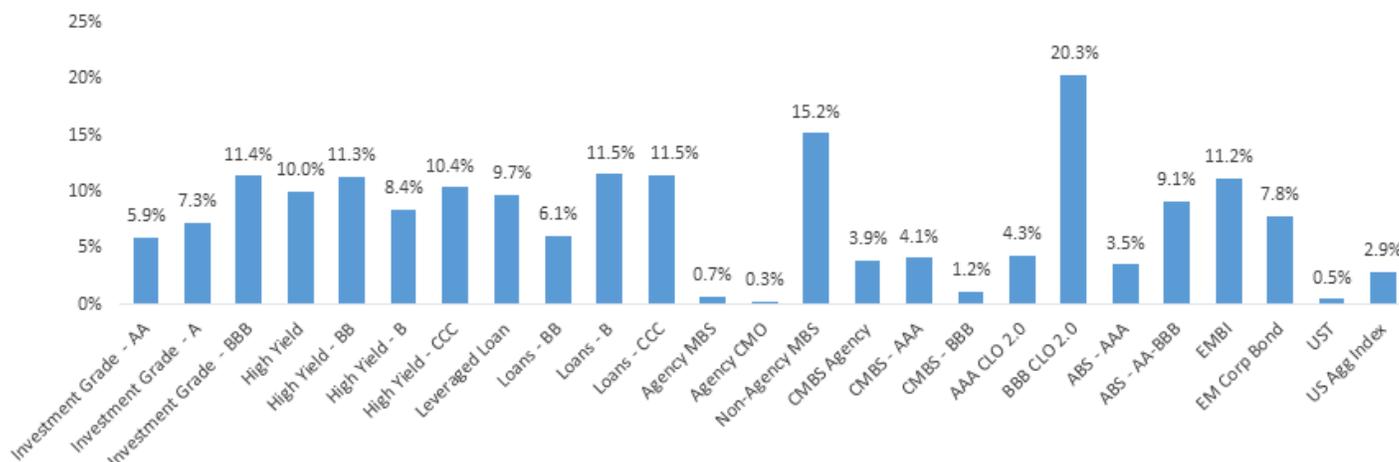
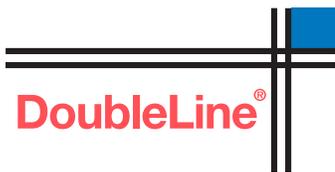


Figure 5
Source: Bloomberg, DoubleLine



Structured Products Briefing

July 23, 2020

Quarter-over-quarter (QoQ), the U.S. Treasury yield curve slightly steepened as measured by the spread between the two-year and 10-year Treasury note. The yield on the two-year note fell 10 basis points (bps), closing at an all-time low of 0.15% as of June 30. The yield on the 10-year note fell 1 bp, closing at 0.66% as of June 30. The yield on the 30-year bond rose 9 bps in the quarter, ending June at 1.41%. For comparison, the Bloomberg Barclays US Treasury Index returned 0.48%. (Figure 6)

U.S. Yields	6/30/2020	3/31/2020	12/31/2019	2Q20 Change	YTD Change
Effective Fed Funds Rate	0.08%	0.02%	1.56%	0.06%	-1.48%
3-Month T-Bill	0.13%	0.06%	1.54%	0.07%	-1.41%
2-Year Note	0.15%	0.25%	1.57%	-0.10%	-1.42%
5-Year Note	0.29%	0.38%	1.69%	-0.09%	-1.40%
10-Year Note	0.66%	0.67%	1.92%	-0.01%	-1.26%
30-Year Bond	1.41%	1.32%	2.39%	0.09%	-0.98%
2s10s Spread (bps)	51	42	35	9	16
3mo10yr Spread (bps)	53	61	37	-8	16

Figure 6

Source: Bloomberg, DoubleLine

The Fed's two-day Federal Open Market Committee (FOMC) meeting on June 9 and 10 didn't result in any unexpected policy changes, with the central bank projecting no increases in the Fed Funds Target Rate through 2022. Chairman Jerome Powell said the Fed is committed to providing more support for the economy and "to do whatever we can for as long as it takes." In addition, the Fed will maintain its Treasury and mortgage purchases at the current pace to sustain smooth market functioning, further reducing volatility expectations. YTD, markets directly supported by the Fed were largely positive while those that were not given explicit support generally remained negative through July 22. (Figure 7)

YTD Fixed Income Sector Returns | July 22, 2020

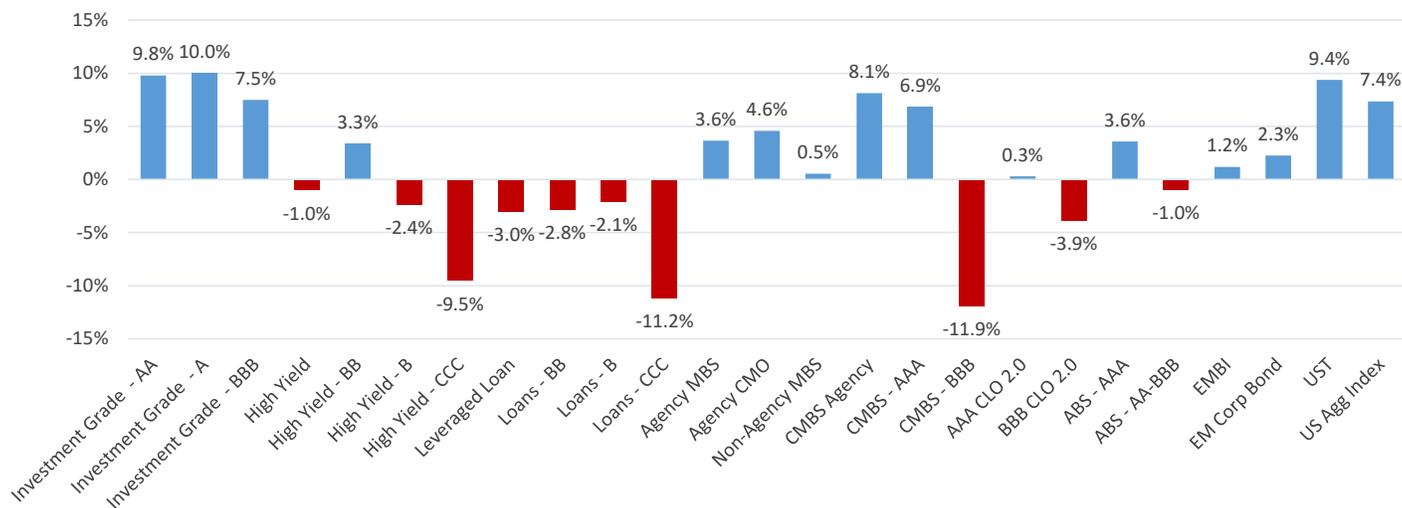
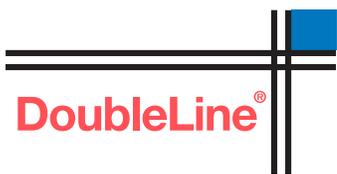


Figure 7

Source: Bloomberg, DoubleLine



Structured Products Briefing

July 23, 2020

Fixed Income Cross Sector Data

Yield-to-Worst (YTW)	6/30/2020	3/31/2020	12/31/2019	2Q20 Change	YTD Change
U.S. Aggregate (LBUSTRUU)	1.25%	1.59%	2.31%	-0.34%	-1.06%
U.S. Treasury (LUATTRUU)	0.50%	0.58%	1.80%	-0.08%	-1.31%
U.S. Agency MBS (LUMSTRUU)	1.36%	1.34%	2.54%	0.02%	-1.18%
U.S. Agency CMO (CMOS)	1.05%	1.60%	2.52%	-0.55%	-1.47%
U.S. Agency CMBS (BACBTRUU)	1.18%	2.19%	2.35%	-1.01%	-1.17%
U.S. CMBS AAA (LC16TRUU)	1.45%	2.26%	2.40%	-0.81%	-0.95%
U.S. CMBS BBB (LC31TRUU)	8.03%	4.09%	4.36%	3.94%	3.67%
U.S. ABS AAA (LUABTRUU)	0.85%	2.04%	2.05%	-1.19%	-1.19%
U.S. ABS AA-BBB (RO02)	5.21%	7.44%	3.89%	-2.23%	1.32%
U.S. CLO AAA (JCLOAAAY)	2.10%	3.21%	2.97%	-1.10%	-0.87%
U.S. CLO BBB (JCLOBBBY)	5.36%	8.41%	5.49%	-3.05%	-0.13%
U.S. Investment Grade Credit (LUCRTRUU)	2.05%	3.23%	2.79%	-1.18%	-0.74%
U.S. Corporate High Yield (LF98TRUU)	6.87%	9.44%	5.19%	-2.57%	1.68%

Option Adjusted Spreads (Basis Points)	6/30/2020	3/31/2020	12/31/2019	2Q20 Change	YTD Change
U.S. Aggregate (LBUSTRUU)	68	95	39	-27	29
U.S. Agency MBS (LUMSTRUU)	70	60	39	10	31
U.S. Agency CMO (CMOS)	83	65	50	18	33
U.S. Agency CMBS (BACBTRUU)	77	130	58	-53	19
U.S. CMBS AAA (LC16TRUU)	106	168	64	-62	42
U.S. CMBS BBB (LC31TRUU)	740	687	257	54	484
U.S. ABS AAA (LUABTRUU)	68	213	44	-144	25
U.S. ABS AA-BBB (RO02)	486	703	218	-217	268
U.S. CLO AAA (JCLOAAAM)*	179	268	128	-89	51
U.S. CLO BBB (JCLOBBBM)*	488	773	367	-284	121
U.S. Investment Grade Credit (LUCRTRUU)	142	255	90	-112	52
U.S. Corporate High Yield (LF98TRUU)	626	880	336	-254	289

Option Adjusted Duration (Years)	6/30/2020	3/31/2020	12/31/2019	2Q20 Change	YTD Change
U.S. Aggregate (LBUSTRUU)	3.18	3.46	3.89	-0.28	-0.71
U.S. Agency MBS (LUMSTRUU)	2.07	1.67	3.21	0.40	-1.14
U.S. Agency CMO (CMOS)	2.66	2.59	3.95	0.07	-1.29
U.S. Agency CMBS (BACBTRUU)	5.70	5.57	3.95	0.13	1.75
U.S. CMBS AAA (LC16TRUU)	5.27	5.22	5.19	0.06	0.08
U.S. CMBS BBB (LC31TRUU)	4.83	4.77	4.89	0.06	-0.06
U.S. ABS AAA (LUABTRUU)	4.12	4.04	4.20	0.08	-0.08
U.S. ABS AA-BBB (RO02)	4.12	4.04	4.20	0.08	-0.08
U.S. Investment Grade Credit (LUCRTRUU)	8.28	7.68	7.65	0.59	0.63
U.S. Corporate High Yield (LF98TRUU)	3.90	4.06	3.05	-0.16	0.86

Source: Bloomberg, DoubleLine

*Discount Margin (DM) over 3-month LIBOR

Sector Commentary

Agency Mortgage-Backed Securities

Fed: Instead of reducing its MBS portfolio at a pace of \$20 billion per month following the unwinding of QE3, the Fed net purchased more than \$550 billion in roughly three months. At the June FOMC meeting, the Fed affirmed a pace of \$40 billion of net purchases per month. J.P. Morgan estimates that the Fed is on pace to bring its total net purchases close to \$800 billion by year's end. Additionally, the Fed purchased approximately \$9.25 billion of Agency CMBS as of June 30.

Prepayments: The constant prepayment rate (CPR) for April, May and June largely printed faster than analysts expected. The increase in aggregate conventional speeds was primarily driven by an increase in day count, brokers speeding up their processing time and higher seasonal turnover. (Figure 8)

Most of the prepay increase across Ginnie Mae cohorts can be attributed to buyouts of delinquent loans 90 days or older. Across buyouts, loans with 2018 vintage and higher coupons marked the highest CPRs.

Agency Constant Prepayment Rate (CPR) | June 30, 2020

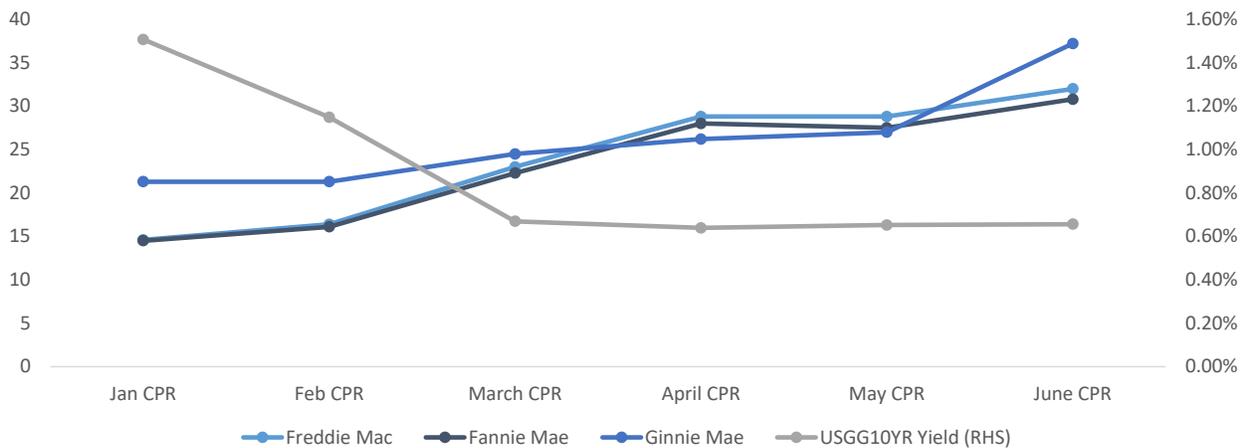


Figure 8
Source: eMBS, DoubleLine

Spreads: In mid-March, mortgage spreads widened to their highest levels since the 2008-2009 crisis. In response to the QE4 purchases, which initially were up to \$50 billion per day, spreads have nearly returned to their pre-March levels and have since been relatively range bound, widening 10 bps during the quarter. Agency MBS option-adjusted spreads (OAS) ended June at 70 bps, wider than the YTD one-, three-, five- and 10-year averages. (Figure 9)

Bloomberg Barclays US MBS Index OAS (bps) | June 30, 2020

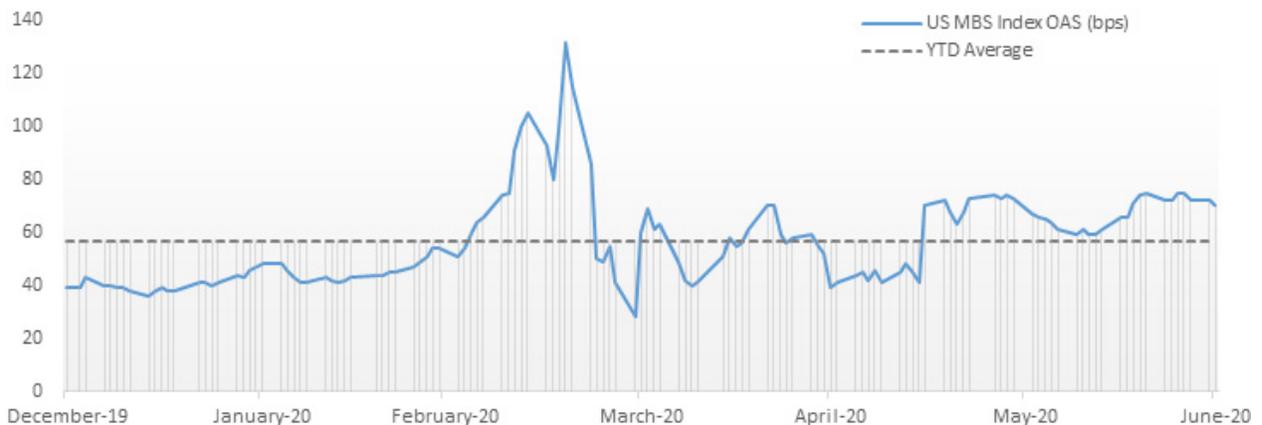
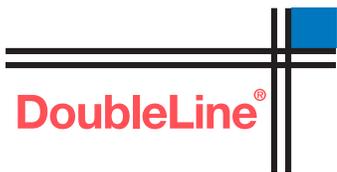


Figure 9
Source: Bloomberg, DoubleLine



Structured Products Briefing

July 23, 2020

Agency CMBS OAS tightened 53 bps during the quarter, closing at 77 bps as of June 30.

Forbearance: The aggregate forbearance rate for government-backed mortgages was 8.39% for the week ended June 28, representing 4.2 million mortgages, according to the Mortgage Bankers Association (MBA).

The forbearance share for mortgages backed by government-sponsored enterprises (GSEs) was 6.17%. The forbearance share for loans in Ginnie Mae securities, mortgages backed by the Federal Housing Administration (FHA), Veterans Affairs (VA) and Department of Agriculture (USDA) was 11.72%.

It is unlikely that 100% of borrowers in forbearance will default. Prior to the Global Financial Crisis (GFC), roughly one in four borrowers owed more on their homes than the properties were worth. Now, nearly 98% of all borrowers have equity in their homes, according to CoreLogic. Borrowers that are unable to make mortgage payments after the forbearance period are more likely to sell their homes than default.

Delinquency: Aggregate 30-day delinquency rates were 5.6% for 30-year Freddie Mac loans and 5.8% for 30-year Fannie Mae loans as of June 30. Across vintages, the 2018 vintage, which has the highest loan-to-value (LTV) ratio and lowest average FICO scores, continued to have the highest delinquencies. Higher coupons also had a higher share of delinquent loans relative to lower coupons.

Overall, delinquencies have plateaued in line with the trend in forbearance rates.

Non-Agency Residential Mortgage-Backed Securities

Spreads: Spreads remain wider than pre-COVID-19 levels but have tightened significantly across most RMBS sectors since the depths of March. The spread between legacy RMBS and investment grade corporate paper tightened modestly throughout the quarter but remains wide relative to historical levels, with legacy paper trading at roughly 250 bps to 300 bps spread over swaps.

AAA-rated re-performing loans (RPL) are now trading with a spread of less than 200 bps, well inside their recent wides of approximately 400 bps. Unrated non-performing loans (NPL)/RPL front pays retraced all of their price declines and currently trade near par. Credit Risk Transfers (CRT) M2s, which carry an investment grade rating, are also trading near par after trading in the \$60-\$70 range in March. (Figure 10)

Spread by Collateral Type: Non-Agency RMBS | June 30, 2020

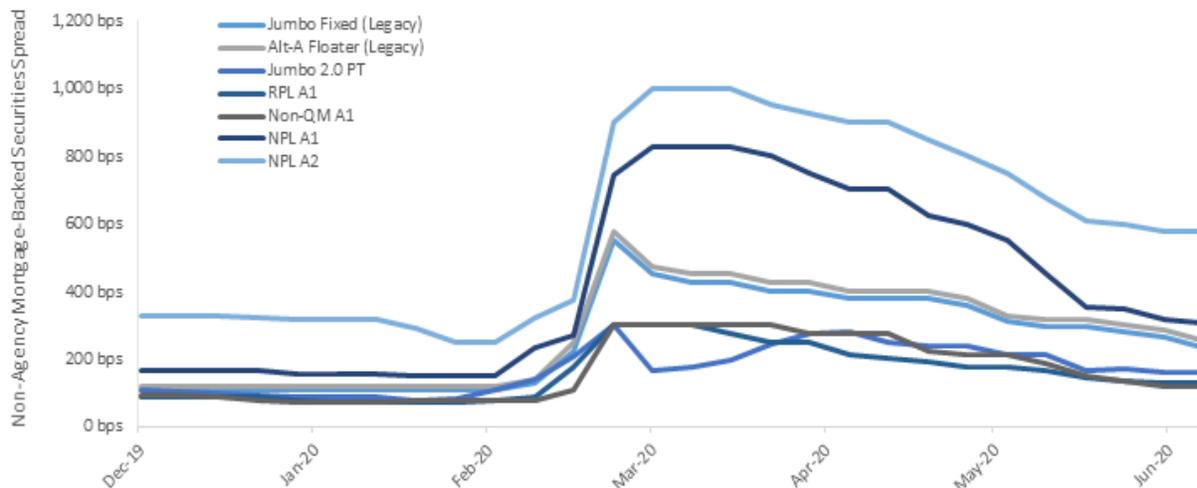
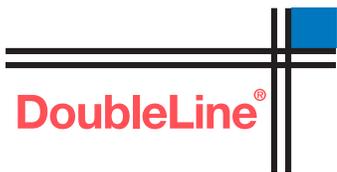


Figure 10

Source: BofA Global Research, DoubleLine



Structured Products Briefing

July 23, 2020

Forbearance: Mortgage forbearance during the quarter peaked in May at approximately 9.5% for private-label (PL) mortgages and finished the quarter at 9.3%.

Notably, nearly half of all PL loans in forbearance remained current on their mortgage payments.

Fundamentals: Housing data largely surprised to the upside throughout the quarter. The most-recent reading of home prices for April showed an increase of 4.0% year-over-year (YoY). Notably, median single-family home prices increased 2.4% while median condominiums and co-op prices decreased 1.6%.

The inventory for existing homes remains at a 35-year low. Realtor.com estimates that national inventory in May was down close to 20% YoY, and new listings were down close to 30%. This should continue to be a tailwind for home prices in the near term.

Issuance: Liquidity across RMBS has improved, and the new issue market reopened at the end of April. As demand built up, June 2020 was the strongest June for new issuance since 2018. Second quarter issuance totaled \$11.7 billion, comprising mainly non-qualified mortgage (non-QM), prime jumbo and single-family rental (SFR).

Demand during the quarter was strong as most new issue deals were heavily oversubscribed.

The supply-demand in RMBS remains positive for the sector and should continue as issuance in the summer months is expected to be light.

Commercial Mortgage-Backed Securities

Fed: The Fed announced on April 8 that legacy conduit AAA CMBS would be included in TALF 2.0. As of July 6, the Fed had supplied approximately \$975 million in loans during the first two subscription dates for TALF, which included roughly \$369 million for CMBS. The facility is currently set to offer two subscriptions per month through September 30.

Spreads: CMBS secondary market cash spreads were largely one-directionally tighter during the quarter, as technicals generally outweighed concerns over fundamentals. For the quarter, AAA last cash flows (LCFs) tightened by 75 bps to swaps +110 bps while BBB-s tightened by 315 bps to swaps +735 bps.

Inclusion of legacy conduit AAA paper in TALF helped shore up spreads at the top of the capital stack in the quarter and ultimately facilitated spreads for lower-rated bonds to tighten as well. (Figure 11)

Yield-to-Maturity by Credit Rating: CMBS | December 31, 2019 through June 30, 2020

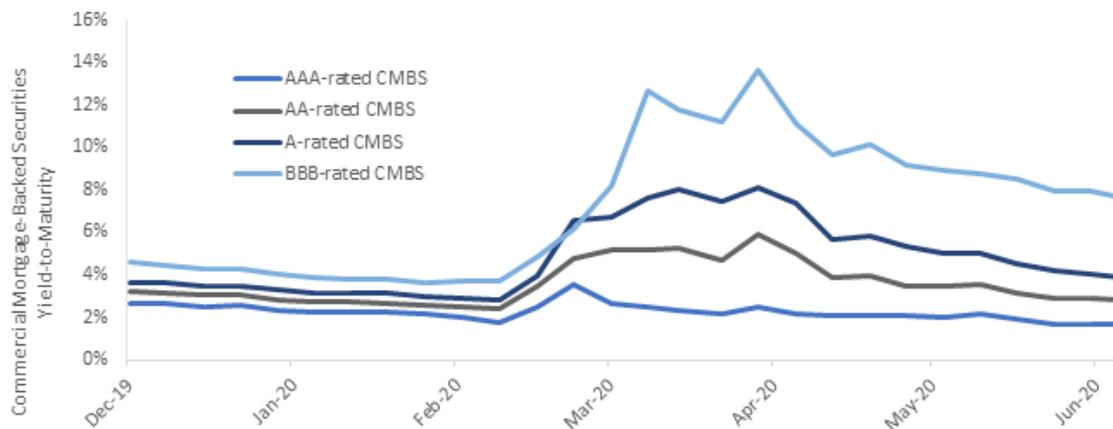
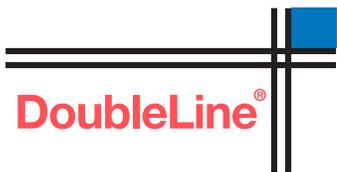


Figure 11

Source: J.P. Morgan, DoubleLine



Structured Products Briefing

July 23, 2020

Forbearance: The number of borrowers that requested forbearance increased over the quarter. It's estimated that borrowers with about \$50 billion in outstanding balance have requested forbearance since the start of the pandemic.

Delinquency: Thirty-day-plus delinquency rates in the post-2008 CMBS universe increased to 9% in the June remittance reports compared to 6% in May. The pickup in delinquencies has been driven by lodging and retail loans so far.

The magnitude of the delinquencies is very great, and, more importantly, the pace of the pickup in delinquencies to date has been fast. As a comparison, it took about 18 months for delinquency rates to reach similar levels during the GFC in 2007-09.

Fundamentals: Commercial real estate (CRE) price growth began to feel the effects of COVID-19, with the RCA U.S. All-Property Commercial Property Price Index (CPPI) posting a 19 bps increase in May, slowing to 5.0% YoY growth.

Office price growth fared the worst in May, posting a negative 0.43% return. Despite the effects of the pandemic, industrial price growth continued to trend positively in May, posting a 0.20% return, albeit at a slower pace than the double-digit gains seen for most of 2019.

Lodging and retail remain the most-challenged sectors within the CRE market. Concerns with office (i.e., the impact of work-from-home, increasing sublease availability, lower leasing activity) and multifamily (i.e., the impact to collections after July if government stimulus is not extended, urban-to-suburban migration trends in select metro markets) are ongoing and monitored.

Issuance: Second quarter issuance totaled \$33.4 billion, a 30% decrease YoY impacted by the ongoing volatility associated with COVID-19. The issuance volume for the second half of 2020 is expected to remain muted, with full year 2020 forecasted to be roughly 50% below 2019.

Given the lack of new issue conduit paper, new issue deals that did come to market saw significant demand in the quarter despite concerns over CRE fundamentals. New issue transactions post-March have been sanitized to limit exposure to riskier lodging and retail sectors.

Year-to-Date Performance by Credit Rating: CMBS | December 31, 2019 through June 30, 2020

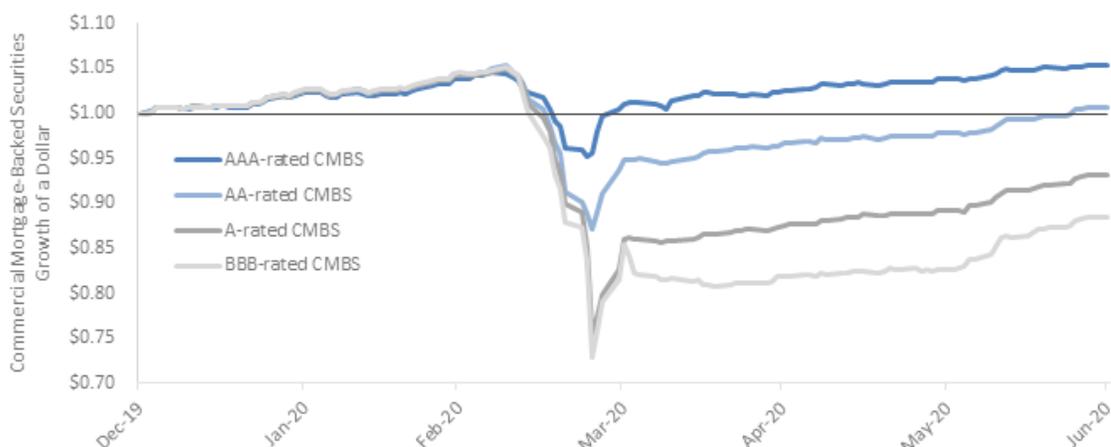
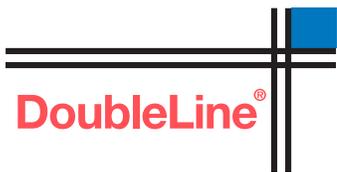


Figure 12

Source: Bloomberg, DoubleLine



Structured Products Briefing

July 23, 2020

Asset-Backed Securities

Fed: The first TALF loan subscription date was June 17. As of July 6, the total requests over the two subscription dates were \$975 million, with 50% in Small Business Administration (SBA) loans, 38% CMBS, 11% in premium finance ABS and 1% in private credit student loan ABS, according to the New York Fed.

With spreads across most ABS issuers and sectors inside of TALF’s funding cost, TALF utilization is expected to remain low. For example, when program details were released back in early April, TALF returns for private credit student loans were estimated at just under 16%, with a spread at the time of approximately 250 bps, compared to an estimated return of 2.83% with an approximately 120 bps spread at the end of June.

Even though TALF utilization for ABS is expected to be low, the announcement of the program contributed to stabilizing investor confidence. Moreover, TALF could provide a ceiling to AAA-rated ABS spreads should market conditions deteriorate again.

Spreads: At the midpoint of 2020, current ABS spreads generally give no indication of recession concerns, having mostly recovered over the second quarter from the pandemic-induced spread product sell-off in March. With investment grade corporate bond spreads starting June at just 173 bps, many ABS sectors had room to tighten on a relative basis. Consumer, franchise and container ABS tightened by 50 bps to 75 bps while aircraft and subprime auto tightened by 100 bps to 200 bps in June.

AAA-rated subprime auto and equipment ABS still offer an attractive spread pickup relative to investment grade corporate bonds, without taking on excessive credit risk. AAA subprime auto and equipment ABS spreads are still about 50 bps to 70 bps wider than their pre-COVID-19 tight. (Figure 13)

Spread by Collateral Type: ABS | December 31, 2019 through June 30, 2020

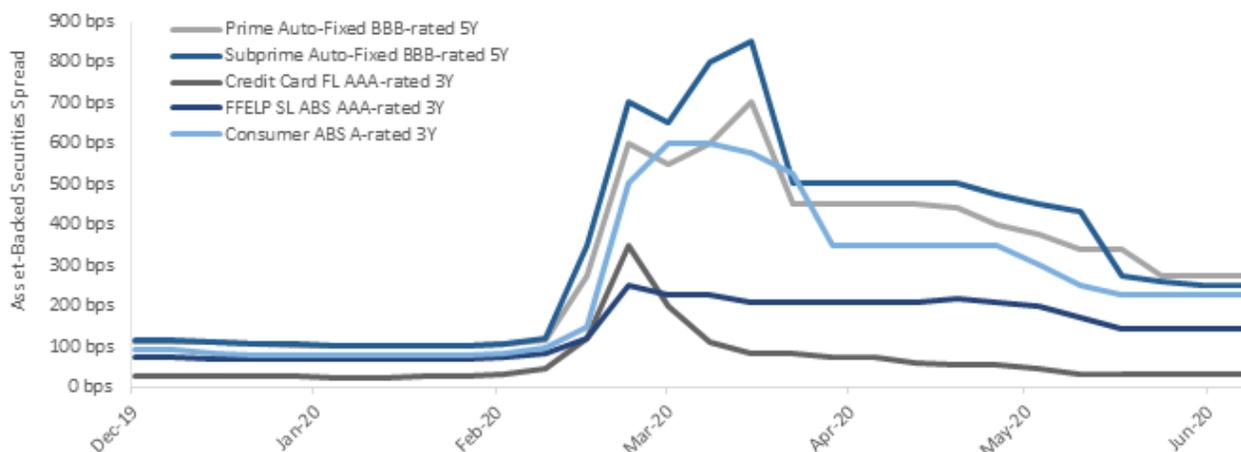
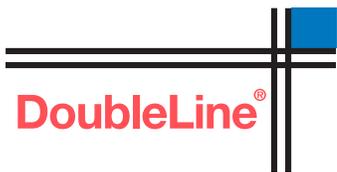


Figure 13
Source: BofA Global Research, DoubleLine

Issuance: Gross ABS issuance during the second quarter was roughly \$36 billion, bringing the 2020 YTD total to about \$87 billion. YTD issuance remains roughly 31% behind the same period last year.

Thirty different ABS transactions priced in June in a testament to the market’s demand for both consumer and commercial ABS types. Favorable supply-demand trends will likely drive ABS spreads incrementally tighter absent a COVID-19 resurgence that would threaten the economic recovery.



Structured Products Briefing

July 23, 2020

Fundamentals: Weekly continuing jobless claims are highly correlated with the unemployment rate, which is a key driver of consumer ABS credit performance. Enhanced unemployment benefits and direct individual payments from the Coronavirus Aid, Relief and Economic Security (CARES) Act, along with payment deferments from lenders, have helped bridge the gap in pay for many consumers.

Most of the negative rating actions across rating agencies were negative watches, with only limited downgrades thus far. Roughly half of the downgrades were a direct result of the performance of vehicle rental chains Hertz and Avis. The remaining actual rating downgrades came from the “other” ABS sectors with direct and immediate performance impacted by COVID-19, including aircraft lease, small-business loan and franchise ABS.

Year-to-Date Performance by Credit Ratings: ABS | December 31, 2019 through June 30, 2020

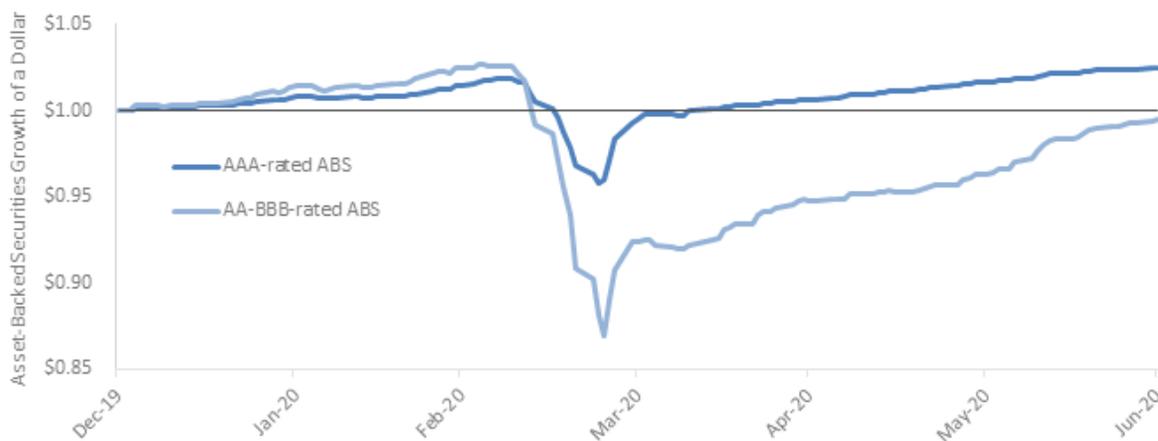


Figure 14
Source: Bloomberg, DoubleLine

Collateralized Loan Obligations

Fed: TALF 2.0 includes new issue static CLO AAA tranches.

Regulation: On June 24, five federal agencies (the Fed, Commodity Futures Trading Commission (CFTC), Federal Deposit Insurance Corp. (FDIC), Office of the Comptroller of the Currency (OCC) and Securities and Exchange Commission (SEC)) approved changes to the Volcker Rule that are expected to go into effect on October 1.

The amendments would allow U.S. banks to own tranches from CLOs holding limited (5%) buckets of debt securities. These buckets would exclude ABS and convertible debt and represent a more-narrow definition than the 5% bucket of any non-loan assets originally proposed.

Broadly speaking, we view CLOs adding bond buckets as positive for CLO equity and marginally negative for CLO debtholders. Bond buckets allow for more trading, and possibly more trading gains, which should benefit equity tranches. Historically, bonds have lower recoveries than loans, potentially hurting debtholders.

Spreads: The discount margin (DM) over three-month LIBOR for AAA CLO ended June at roughly 165 bps. The DM on AAA CLO got as wide as roughly 400 bps the week of March 23; pre-COVID-19, AAA CLOs were trading at roughly 100-150 DM.

The CLO credit curve generally flattened QoQ, with AA CLO spreads tightening roughly 105 bps to approximately 220 bps. A-rated CLO tightened roughly 180 bps to approximately 270 bps. BBB-rated CLO tightened roughly 275 bps to 400 bps. BB-rated CLO tightened by roughly half over the quarter, closing June at 750 bps, compared to approximately 1,500 bps at the end of March.

The absolute pickup in spread between tranches has decreased. However, AAA tranches still look wide on a historical basis relative to the rest of the capital stack. (Figure 15)

Yield-to-Maturity by Credit Rating: U.S. CLO Tranches | December 31, 2019 through June 30, 2020

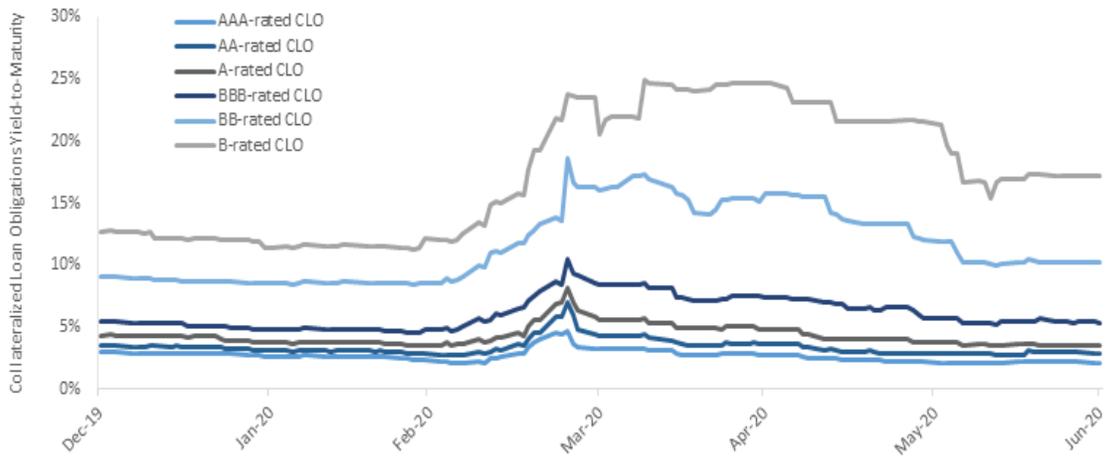


Figure 15

Source: J.P. Morgan, DoubleLine

Issuance: Since the start of the year, \$35 billion has priced via 79 CLO deals, a YoY decline of 45% by volume and deal count.

Fundamentals: Loan fundamentals generally continued to deteriorate as the trailing 12-month U.S. loan default rate rose to 3.2% in June while rating downgrades continued.

Year-to-Date Performance by Credit Rating: U.S. CLO Tranches | December 31, 2019 through June 30, 2020

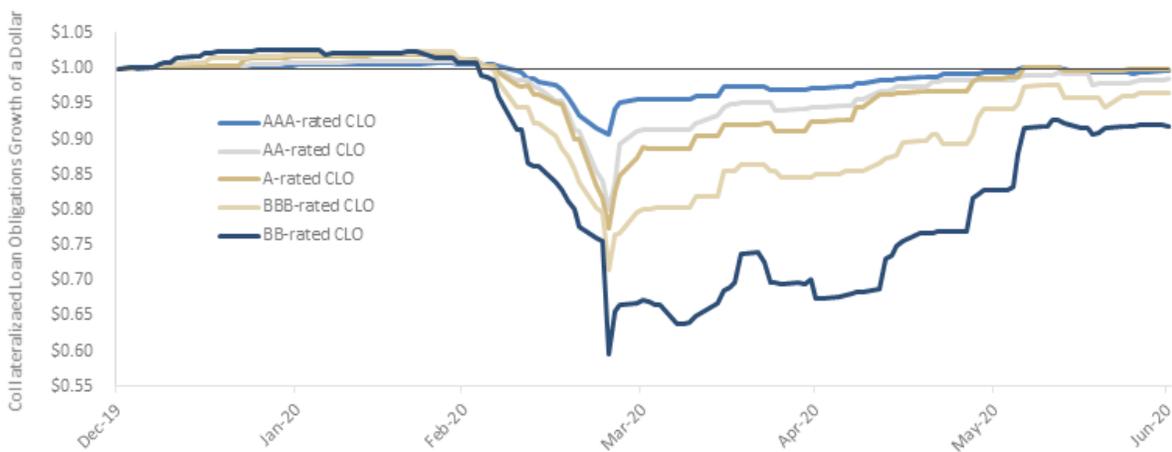
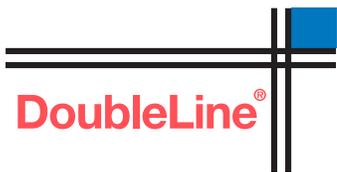


Figure 16

Source: J.P. Morgan, DoubleLine



Structured Products Briefing

July 23, 2020

Definitions

CPFF - The Federal Reserve Board established the Commercial Paper Funding Facility on March 17, 2020 to support the flow of credit to households and businesses.

Government Sponsored Enterprise (GSE) - A quasi-governmental entity established to enhance the flow of credit to specific sectors of the American economy. Created by acts of Congress, these agencies, though privately held, provide public financial services.

MMLF - The Federal Reserve established the Money Market Mutual Fund Liquidity Facility on March 18, 2020 to broaden its program of support for the flow of credit to households and businesses.

NAIC - The National Association of Insurance Commissioners is the U.S. standard-setting and regulatory support organization created and governed by the chief insurance regulators from the 50 states, the District of Columbia and five U.S. territories.

PMCCF - The Federal Reserve established the Primary Market Corporate Credit Facility on March 23, 2020, to support credit to employers through bond and loan issuances.

SMCCF - The Federal Reserve established the Secondary Market Corporate Credit Facility on March 23, 2020, to support credit to employers by providing liquidity to the market for outstanding corporate bonds.

TALF - The Federal Reserve established the Term Asset-Backed Securities Loan Facility on March 23, 2020 to support the flow of credit to consumers and businesses.

Important Information Regarding This Material

Issue selection processes and tools illustrated throughout this presentation are samples and may be modified periodically. These are not the only tools used by the investment teams, are extremely sophisticated, may not always produce the intended results and are not intended for use by non-professionals.

DoubleLine has no obligation to provide revised assessments in the event of changed circumstances. While we have gathered this information from sources believed to be reliable, DoubleLine cannot guarantee the accuracy of the information provided. Securities discussed are not recommendations and are presented as examples of issue selection or portfolio management processes. They have been picked for comparison or illustration purposes only. No security presented within is either offered for sale or purchase. DoubleLine reserves the right to change its investment perspective and outlook without notice as market conditions dictate or as additional information becomes available. This material may include statements that constitute "forward-looking statements" under the U.S. securities laws. Forward-looking statements include, among other things, projections, estimates, and information about possible or future results related to a client's account, or market or regulatory developments.

Important Information Regarding Risk Factors

Investment strategies may not achieve the desired results due to implementation lag, other timing factors, portfolio management decision-making, economic or market conditions or other unanticipated factors. The views and forecasts expressed in this material are as of the date indicated, are subject to change without notice, may not come to pass and do not represent a recommendation or offer of any particular security, strategy, or investment. All investments involve risks. Please request a copy of DoubleLine's Form ADV Part 2A to review the material risks involved in DoubleLine's strategies. Past performance is no guarantee of future results.

Important Information Regarding DoubleLine

In preparing the client reports (and in managing the portfolios), DoubleLine and its vendors price separate account portfolio securities using various sources, including independent pricing services and fair value processes such as benchmarking.

To receive a copy of DoubleLine's current Form ADV (which contains important additional disclosure information, including risk disclosures), a copy of DoubleLine's proxy voting policies and procedures, or to obtain additional information on DoubleLine's proxy voting decisions, please contact DoubleLine's Client Services.

Important Information Regarding DoubleLine's Investment Style

DoubleLine seeks to maximize investment results consistent with our interpretation of client guidelines and investment mandate. While DoubleLine seeks to maximize returns for our clients consistent with guidelines, DoubleLine cannot guarantee that DoubleLine will outperform a client's specified benchmark or the market or that DoubleLine's risk management techniques will successfully mitigate losses. Additionally, the nature of portfolio diversification implies that certain holdings and sectors in a client's portfolio may be rising in price while others are falling or that some issues and sectors are outperforming while others are underperforming. Such out or underperformance can be the result of many factors, such as, but not limited to, duration/interest rate exposure, yield curve exposure, bond sector exposure, or news or rumors specific to a single name.

DoubleLine is an active manager and will adjust the composition of clients' portfolios consistent with our investment team's judgment concerning market conditions and any particular sector or security. The construction of DoubleLine portfolios may differ substantially from the construction of any of a variety of market indices. As such, a DoubleLine portfolio has the potential to underperform or outperform a bond market index. Since markets can remain inefficiently priced for long periods, DoubleLine's performance is properly assessed over a full multi-year market cycle.

Important Information Regarding Client Responsibilities

Clients are requested to carefully review all portfolio holdings and strategies, including by comparison of the custodial statement to any statements received from DoubleLine. Clients should promptly inform DoubleLine of any potential or perceived policy or guideline inconsistencies. In particular, DoubleLine understands that guideline enabling language is subject to interpretation and DoubleLine strongly encourages clients to express any contrasting interpretation as soon as practical. Clients are also requested to notify DoubleLine of any updates to client's information, such as, but not limited to, adding affiliates (including broker dealer affiliates), issuing additional securities, name changes, mergers or other alterations to Client's legal structure.

CFA® is a registered trademark owned by CFA Institute.

DoubleLine Group is not an investment adviser registered with the Securities and Exchange Commission (SEC).

DoubleLine® is a registered trademark of DoubleLine Capital LP.

© 2020 DoubleLine Capital LP