

2021 Market Outlook

Promising Signs for Securitized Products

The impacts of COVID-19 on risk and performance across securitized sectors have varied significantly. Yet, we believe the market has reasonably adjusted credit spreads to reflect current risk profiles (*Display 1*), making the outlook for securitized assets in 2021 look promising after a roller-coaster year in 2020.



GREGORY FINCK

*Portfolio Manager
Head of Securitized,
Global Fixed Income Team*



ERIN GLENN

*Portfolio Specialist
Global Fixed Income Team*

Agency MBS: The Fed Is Back

Agency mortgage-backed securities (MBS) held up well during the first quarter of 2020 as investors found the asset class to be a haven in their hunt for decent yield given that agency MBS have high liquidity and virtually no credit risk. In March, the Fed announced the renewal of its massive MBS purchase program, which pushed spreads even tighter (*Display 2*).

However, while agency MBS should remain supported in 2021 by the continuation of the Fed's MBS purchase program, agency mortgage-backed securities (MBS) now look moderately expensive.

Nominal spreads on current coupon agency MBS began 2020 trading at 91 basis points above interpolated U.S. Treasuries. However, spreads tightened 20 basis points during 2020—almost exclusively a function of the Fed purchases during the period—and ended the year trading at 71 basis points above interpolated treasuries, the tightest spread level since the second quarter of 2019.

Fueled by the lowest mortgage rates in U.S. history—hitting new historic lows again in December: 2.67% for 30-year fixed rate mortgages—prepayment speeds showed no signs of slowing. Issuance volumes of agency MBS hit historic highs in 2020, which we expect to be surpassed in 2021.

The Fed was the entity to absorb this surge in issuance, increasing its market share of agency MBS by more than 8% in 2020, while money managers reduced their ownership by the same amount (*Display 3*). Since their March announcement, the Fed has purchased nearly \$1.5 trillion in agency MBS, bringing their total agency MBS holdings to a new high of \$2.077 trillion, almost one-third of the outstanding agency MBS market.

We expect the Fed to remain substantial buyers of agency MBS, absorbing the majority of this issuance, and the sector should perform relatively well as a result, despite the rich valuations.

DISPLAY 1

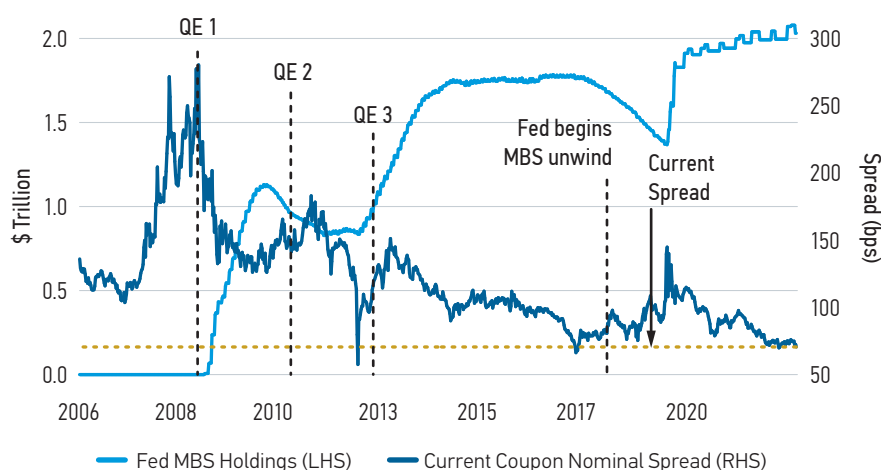
Risk Profile by Securitized Sector Post COVID-19

HIGH RISK Significantly Impacted by COVID-19	MODERATE RISK Weakness in-line with Economic Downturn	LIMITED RISK More Resilient Credit Performance
<ul style="list-style-type: none"> Hotel Commercial Mortgage Backed Securities (CMBS) Retail Shopping CMBS Aircraft Asset Backed Securities (ABS) Small Business Loan ABS 	<ul style="list-style-type: none"> Consumer Credit Office CMBS Multifamily Housing 	<ul style="list-style-type: none"> Agency MBS U.S. Non-Agency RMBS Single-Family Rental Housing European RMBS Auto Loan ABS

DISPLAY 2

Federal Support for Agency MBS Remains Strong

Agency MBS Nominal Spreads Versus Fed Holdings

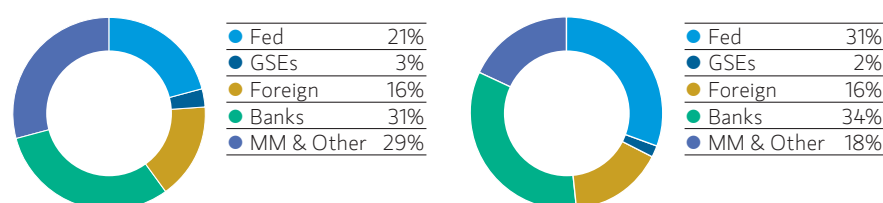


Sources: JP Morgan, the Federal Reserve Bank, and Wells Fargo. Spread data as of December 31, 2020. The yield curve performance is provided for illustrative purposes only. Past performance is no guarantee of future results.

DISPLAY 3

Fed Meaningfully Increased Its Market Share of Agency MBS in 2020

December 2019 Versus September 2020



Sources: JP Morgan, the Federal Reserve Bank, Wells Fargo. Spread data as of November 30, 2020.

So What Is the Fed Buying?

We expect the Fed to continue to buy more agency MBS in 2021, and for as long as economic conditions remain challenging. The Fed's MBS purchases have been primarily concentrated in 30-year 2.0% and 30-year 2.5% coupons, and the TBA rolls in these coupons have traded "special" in recent months as a result. These purchases have migrated down in coupon over time as mortgage rates continued to fall during 2020. As a result, TBA rolls have followed the Fed purchases with "roll specialness," increasing in coupons the Fed is buying, and as a result, offering attractive carry in our opinion. For higher-coupon MBS, specified pools appear to be the only attractive opportunities, as the low-rate environment continues to encourage fast prepayment speeds and negative TBA rolls in this part of the coupon stack.

U.S. Non-Agency RMBS and the State of the U.S. Housing Market

While valuations across many areas of securitized credit have recovered to pre-pandemic levels, we believe there are certain sectors that still offer attractive risk-adjusted opportunities. Our favorite securitized credit sector remains residential credit for several reasons. The housing market has been impressively resilient in the face of the COVID-19 pandemic with home prices up over 7% over the past year.¹ Mortgage forbearance requests and mortgage delinquencies have subsided after rising in March and April, although even the peak levels during the pandemic did not approach levels that threatened most non-agency RMBS. The structures of most non-agency RMBS in the post-financial crisis era have been designed to withstand very high levels of defaults and losses without threatening the RMBS securities, default levels that we believe will not be reached during this pandemic.

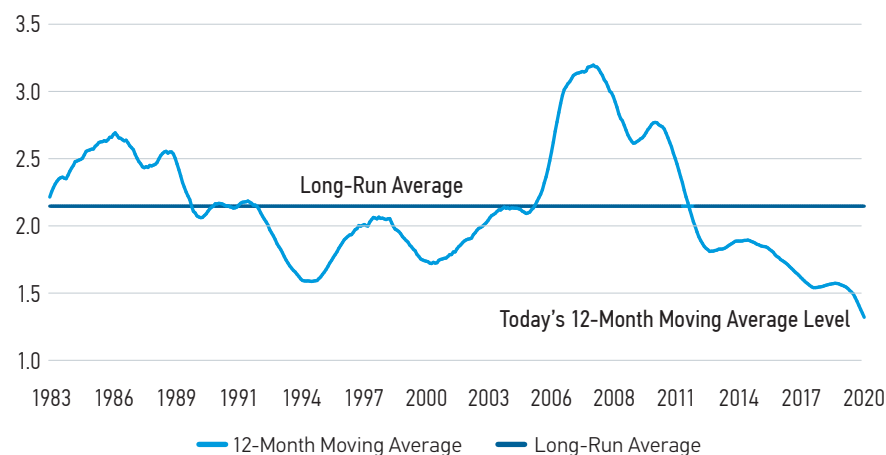
Positive Home Supply/ Demand Dynamics

As the millennial generation (the largest generation ever) transitions into

DISPLAY 4

Low Existing Home Inventory: Positive Technical for HPA

Existing Home Inventory (Millions of Units)

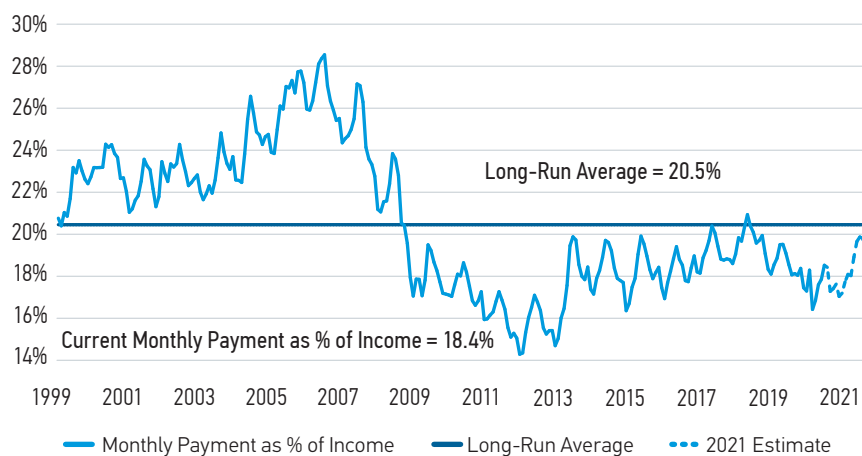


Source: US Census Bureau, NAR, MBA, Freddie Mac, Case Shiller, Morgan Stanley Research estimates as of October 30, 2020.

DISPLAY 5

Housing Remains Historically Affordable

Monthly Mortgage Payment as a Percentage of Income: Historical and 2021 Forecasts



Source: US Census Bureau, NAR, MBA, Freddie Mac, Case Shiller, Morgan Stanley Research estimates.

the home buying stage, the demand for homes has increased significantly over the past decade. However, after the financial crisis there was very little residential construction, and as a result, housing supply levels were at 50-year lows at the beginning of 2020 (Display 4). The COVID-19 pandemic further exacerbated this shortage, as the widespread adoption of the "work-from-

home" dynamic has encouraged buyers to search for homes outside of expensive metropolitan areas.

Housing Remains Affordable

Low mortgage rates have also added to housing demand and have helped keep homes affordable. Thirty-year mortgage rates fell to 2.66% in 2020,

¹ Reflects October 2020 data: home prices up 8.41% YoY for the National Index as of October 2020. Source: Case-Shiller Home Price Index.

the lowest level in U.S. history. These low mortgage rates have kept housing affordable despite increasing home prices, with the percentage of income required to afford a home still below historical averages (*Display 5*).

We believe price appreciation should remain positive in 2021, but expect the rate of growth to slow to roughly 3% from more than 7% in 2020 (*Display 6*).

Non-Agency RMBS Securitization Structures Much More Robust Post Crisis

RATING AGENCIES AND INVESTORS HAVE DEMANDED MORE STRUCTURAL CREDIT PROTECTION AND IMPROVED LENDING STANDARDS

Finally, since being the epicenter of the global financial crisis, the securitized market has been better structured to handle substantial amounts of economic stress with tighter lending standards and more robust structures. Using the global financial crisis as the ultimate stress test, these bonds are structured with thick levels of credit enhancement able to help withstand substantial default and loss levels, far above the levels we have seen reported during the pandemic.

We believe that these bonds will ultimately be unimpaired from a fundamental credit perspective and that non-agency RMBS delinquency/default rates should continue to improve and remain substantially below structural credit protection levels for most securities.

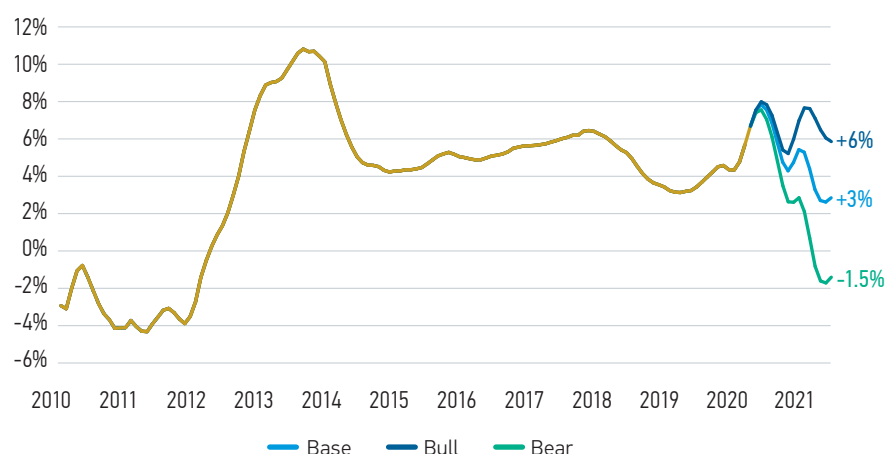
Mortgage Fundamental Performance Fared Relatively Well During the Pandemic and Has Shown Signs of a Strong Rebound

Despite the spike in unemployment due to the global economic shutdowns resulting from COVID-19, mortgage fundamental performance has generally remained positive. Loan delinquencies and forbearance requests increased in March and April, but then declined meaningfully over the remainder of the year (*Display 7*). We believe even at their pandemic peaks, mortgage delinquency and default levels were generally not threatening to the large majority

DISPLAY 6

Historical Home Price Appreciation and Forecast Scenarios

Home Price Change YoY (%)

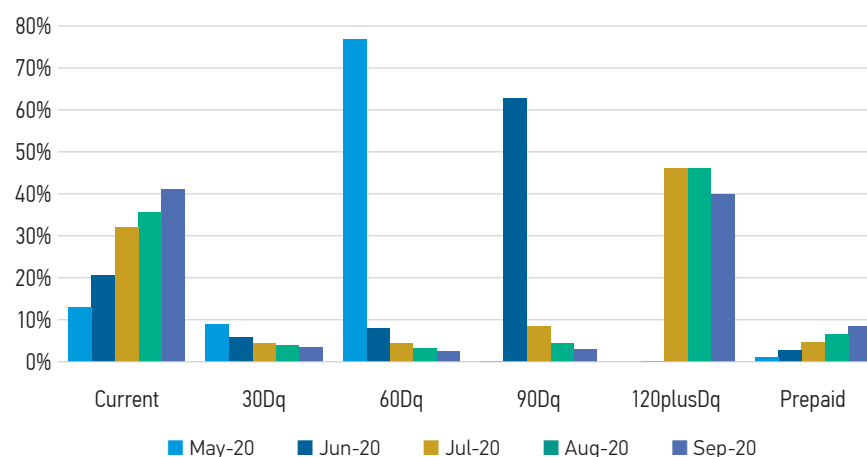


Sources: US Census Bureau, NAR, MBA, Freddie Mac, Case Shiller, Morgan Stanley Research estimates. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

DISPLAY 7

Loan Delinquencies Not Significant for Non-Agency MBS

Of Loans That First Fell Delinquent in April, ~50% Have Either Come Back Current or Have Prepaid



Sources: Fannie Mae, Freddie Mac, eMBS, Morgan Stanley Research.

of non-agency RMBS, which have been structured in the post-financial crisis era to withstand substantial levels of defaults and losses without being impaired.

CMBS: Divergence in Performance and Risk Driven by Property Type

CMBS remains a stressed but potentially timely investment opportunity, as sectors have experienced

divergent performance, which we believe will continue this year (*Display 8*). Multifamily housing (apartments) and office buildings have performed better and have lower risks of near-term defaults, but these sectors could still face challenges if there are fundamental shifts in how people want to live and work in the post-pandemic world. We anticipate a meaningful decline in rent and occupancy levels, particularly

in major cities, which could impact property valuations and refinancing prospects. Hotels and shopping centers have been severely impacted by the pandemic, and remain very stressed and vulnerable to high levels of default. There is significant recovery potential in these sectors but also substantial risk. Industrial and logistics centers seem poised to benefit from the pandemic with increased demand, and consequently look more stable from a credit and valuation perspective.

U.S. ABS: U.S. Consumer Fundamentals Show Signs of Recovery

CONSUMER FUNDAMENTALS REMAIN STRONG BUT MIXED OUTLOOK BY ASSET TYPE

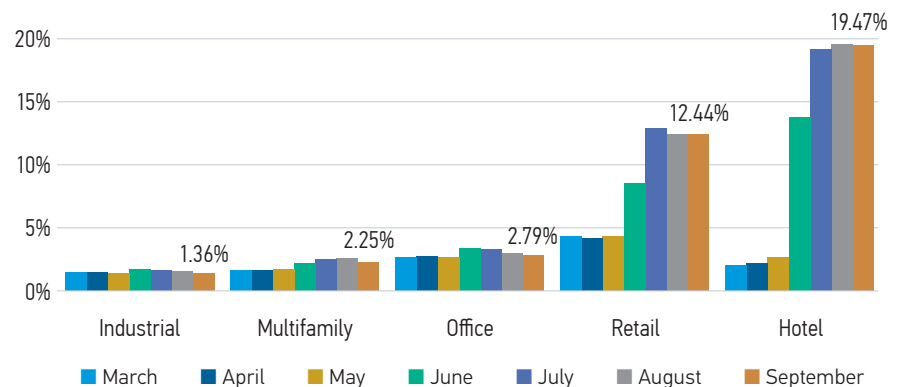
The financial state of the U.S. consumer continues to improve as excess savings increased in 2020 (*Display 9*). Auto loan delinquencies and defaults, even among subprime borrowers, rose minimally during the pandemic, despite the sharp rise in unemployment (*Display 10*). Overall consumer debt levels remain well below historical levels on an inflation-adjusted basis. While these improving fundamentals are crucial to lay the foundation for the road to a global recovery, we believe there are better relative value opportunities in other sectors of the ABS market.

At the security level, U.S. ABS performance has varied significantly by sector, and we expect this divergence to persist. Traditional ABS, such as auto loans, credit cards and consumer loans have performed well during the pandemic, and we expect this strong credit performance to continue. However, current valuations are more expensive than pre-pandemic levels, which we find unattractive on a relative value basis.

The most COVID-19-challenged ABS sectors offer much more recovery potential. Aircraft leases, small business loans and mortgage servicing assets offer much more attractive ABS value opportunities in our opinion and are poised to benefit if the economy recovers strongly.

DISPLAY 8

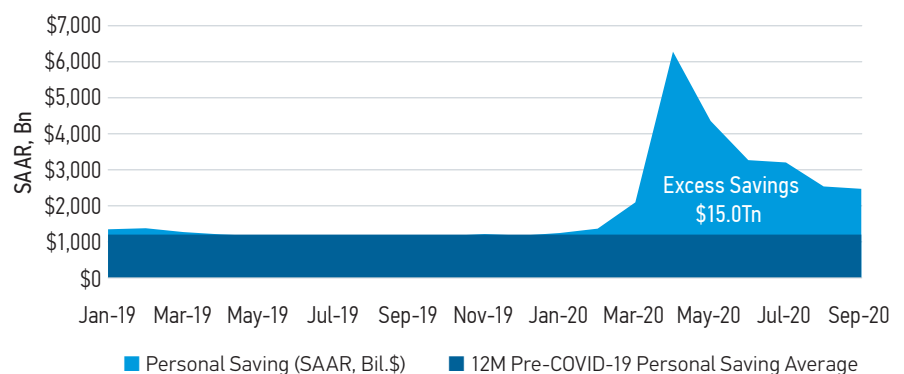
Hotel and Retail CMBS Delinquency Rates Rise Sharply



Source: Bank of America Research

DISPLAY 9

U.S. Consumer Excess Savings Remain Elevated

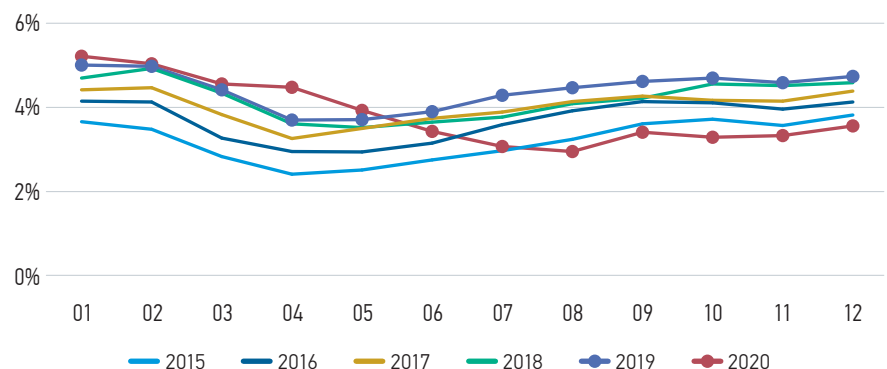


Source: Bureau of Economic Analysis, Morgan Stanley Research. Note: These figures are annualized (x12). Morgan Stanley Research calculated excess savings by taking the cumulative difference in personal saving from April to September compared to the 12-month average personal saving level from March 2019 to February 2020.

DISPLAY 10

Auto Delinquencies Remain Subdued

Subprime Auto Delinquencies by Years



Source: Morgan Stanley Research, Intex.

Europe

European markets are experiencing similar sector-specific performance dynamics, and overall performance has been in line with the U.S. for comparable assets. European spreads are now back in line with comparable U.S. assets after being tighter for most of the year, as U.S. assets have tightened substantially over the last few months. European securitized markets should remain well supported by the

historically low rates prevailing in Europe and by the asset purchase and lending programs of the ECB and BOE.

Conclusion

Although we enter the new year with COVID-19 cases rising around the globe, we are seeing steps being made towards a more optimistic future. The implementation of several vaccines, continued levels of unprecedented Central Bank support, and renewed

fiscal stimulus packages are all laying down a foundation that should help bridge global economies, companies and individuals to a post-pandemic world.

Overall, we remain constructive on securitized credit and have a modest credit overweight across our portfolios, although we remain conscious of liquidity issues given the experiences of last March and cautious regarding ongoing COVID-19 concerns.

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