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#### **OUTLOOK**

7 December 2020



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#### **TABLE OF CONTENTS**

Summary 1
As pandemic-tied risks remain, tightened underwriting and structural features that stabilize cash flows will support credit quality in new deals 2
COVID-19-tied defaults will weaken existing deal performance 8
Several global credit themes will affect US RMBS in 2021 13
Moody's related publications 15

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# 2021 Outlook – COVID-19 fallout will drive originators to uphold high standards, but weaken existing deals' performance

#### **Summary**

Lender and sponsor responses to COVID-19 will support strong credit quality for new deals in 2021, as underwriting standards remain somewhat tighter than pre-pandemic levels for most new residential mortgage-backed securities (RMBS). Furthermore, structural features in new deals will mitigate cash flow disruptions tied to COVID-19 payment holidays. However, for existing transactions, defaults will rise among financially strained borrowers when relief plans expire, while historically high home prices will motivate others to make mortgage payments or refinance.

- » As pandemic-tied risks remain, tightened underwriting and structural features that stabilize cash flows will support credit quality in new deals. The credit quality of new assets will remain strong across product types as lenders stay vigilant about fallout from the pandemic. However, as economic conditions normalize, origination standards will likely loosen. Similarly, while warranted, sponsors will continue to include structural features in new deals that look to shield investors from potential cash flow disruptions in the event that obligor finances further deteriorate.
- » COVID-19-tied defaults will weaken existing deal performance. Borrowers in payment holiday plans who remain unable to service their debt once the plans expire will drive up modifications and defaults. For obligors with firmer finances, COVID-19-tied homeowner relief and steady home prices will continue to mitigate default risk and low interest rates will drive up prepayments. In addition to strong home prices, declining unemployment will also support performance. Meanwhile, servicers' inconsistent COVID-19 reporting practices will continue to dilute performance transparency, even in new issuance.

#### Recovery from the COVID-19 crisis will depend on several factors

The economic recovery over the coming year will be highly dependent on three factors: (1) the development and distribution of a coronavirus vaccine, (2) effective pandemic management, and (3) government policy support. Our baseline forecasts assume that difficulty in controlling the virus will hinder the gradual process of recovery in the short term. But over time, we expect better pandemic management and the availability of an effective vaccine or treatments to reduce the importance of the virus as a macroeconomic variable. Our forecasts further assume that an effective vaccine is unlikely to be available widely before the middle of 2021. Until then, robust pandemic management will be essential for sustaining a steady economic recovery in individual countries.

## As pandemic-tied risks remain, tightened underwriting and structural features that stabilize cash flows will support credit quality in new deals

Until economic conditions normalize, lenders will maintain tightened underwriting standards across product types, supporting strong credit quality, while structural features will shield notes from cash flow disruptions. On the whole, the strong borrower credit quality in prime jumbo and government-sponsored enterprise credit risk transfer (GSE CRT) RMBS will position those deals well to withstand the COVID-19 economic disruption, although deals with high concentrations of self-employed borrowers will be more vulnerable. Stable home prices will bolster both single-family rental (SFR) and inactive reverse mortgage RMBS, whose credit quality highly depends on property values, and SFR will additionally benefit from positive rental market fundamentals, especially in the suburbs. re-performing, non-prime, and expanded prime transactions will be more exposed to COVID-19 economic disruption, as these sectors are exposed to borrowers with weaker credit quality.

#### Stricter underwriting will strengthen asset credit quality across sectors

In response to COVID-19-related risks, lenders will maintain somewhat tightened underwriting standards, supporting the credit quality of new assets, though the rise of alternative valuation products will increase collateral risks somewhat (see asset trends in Exhibit 1). However, as the unemployment rate declines and moves closer to pre-pandemic levels underwriting will likely relax.

Exhibit 1

Asset trends for 2021

	2021	2020
Prime jumbo	» The share of collateral originated with alternative valuation products will rise.	» In response to the pandemic, lenders tightened underwriting standards and sponsors avoided including loans in payment holidays in securitizations.
GSE CRT	<ul> <li>Excluding loans in payment holidays will strengthen pools, but an increasing proportion of appraisal waivers will pose some property valuation risks.</li> <li>New pools may include more loans to lower-income borrowers if the new administration uses the GSEs to expand the affordable housing mandate.</li> </ul>	<ul> <li>Asset credit quality improved, reflecting tightened underwriting and the avoidance of loans in payment holidays.</li> <li>However, the share of pooled loans with an appraisal waiver increased.</li> </ul>
MI CRT	» Mortgage insurance providers' bolstered underwriting and increased pricing will uphold asset quality.	» MI providers implemented underwriting overlays to GSE guidelines and increased pricing to mitigate COVID-19 risk.
RPL	» New RPL deals will include loans with COVID-19-tied loan modifications, which will likely perform better than those resulting from persistent financial distress, such as modified pre-crisis loans.	» The share of post-2010 re-performing loans increased as pre-2010 inventory shrinked.
SFR	» Occupancy rates will remain strong in response to COVID-19-driven residential preferences and shifts in how people work.	» Driven by the pandemic, tenants shifted from multi-family to single-family rentals, increasing SFR portfolio occupancy and renewal rates.
Non-prime	» Asset credit quality will strenghten due to more restrictive non-prime underwriting.      » If enacted, a potential expansion of QM eligiblity would result in a higher share of riskier non-QM loans in non-prime pools.	» Originations shrank as lenders avoided propective borrowers hit hardest by pandemic fallout.
Reverse mortgage	» New collateral pools will continue to mix active and inactive reverse mortgages, as sponsors seek to balance slower cash flows on inactive loans due to longer foreclosure timelines or foreclosure moratoriums with more steady cash flow from active loans paying when assigned to HUD.	» Sponsors started mixing active and inactive HECMs in pools, adding prepayment risks tied to the active loans.

GSE CRT = government sponsored enterprise credit risk transfer. MI = mortgage insurance. RPL = re-performing loans. SFR = single-family rental. HUD = The United States Department of Housing and Urban Development. HECM = Home Equity Conversion Mortgage Source: Moody's Investors Service

» **Prime jumbo:** To mitigate COVID-19-tied credit risks, originators will maintain tightened underwriting criteria, including narrowed employment verification windows and prohibitions or restrictions on cash-out refinance originations and counting business assets as reserves. In addition, loan aggregators will continue to reject and remove loans in payment holidays from securitizations. In 2020 such efforts led to higher credit scores, lower debt-to-income ratios (DTI) and a smaller percentage of self-employed borrowers in new pools (see Exhibit 2), trends that are likely to continue. However, for borrowers who participated in relief plans, their missed payments were not reported to credit bureaus, leading to elevated credit scores.

Exhibit 2
Prime pool characteristics for deals issued before and after the pandemic's onset
Examples of prime jumbo transactions

	JPMMT 2019-7	JP Morgan 2020-1	JP Morgan 2020-9	Wells Fargo 2019-3	Wells Fargo 2020-1	Wells Fargo 2020-5
Cut-off date	1/9/2019	1/1/2020	1/11/2020	1/9/2019	1/2/2020	1/10/2020
WA coupon	4.30%	3.98%	3.27%	4.10%	3.75%	3.23%
WA credit score	768	771	779	778	779	782
LTV ratio	69%	69%	71%	71%	71%	72%
DTI ratio	35%	34%	31%	32%	31%	31%
Seasoning (months)	10	3	2	6	5	2
Self-employed borrowers' share of pool	25%	25%	5%	9%	9%	4%
Rate/term refinance loans' share of pool	26%	40%	43%	37%	45%	35%
Cash-out refinance loans' share of pool	12%	13%	5%	10%	8%	1%

Columns highlighted in blue are post-COVID-19 securitization pools. WA = weighted average by unpaid balance. Source: Moody's Investors Service

» **GSE CRT:** Unlike prime jumbo, the GSEs' production of cash-out refinance loans has been unchanged from pre-COVID-19 levels. However, similar to prime jumbo transactions, the exclusion of loans to borrowers who have requested COVID-19 relief will continue to bolster asset credit quality. Supported by ongoing low interest rates, refinance loans will remain elevated. Appraisal waivers in 2021 reference pools will also continue, posing some risks to property valuation accuracy. However, strict loan eligibility criteria for the GSEs' appraisal waiver program, GSE model accuracy on a very large dataset, and federal oversight will mitigate loss risks tied to the rising share of these mortgages. The GSEs started promoting appraisal waivers in recent years to improve underwriting efficiency and the pandemic led to increased use of this alternative. Within STACR's low-LTV DNA shelf, for example, the percentage of appraisal waiver loans increased to 37% in DNA5 from 11% in DNA1 issued earlier this year. Also, appraisal waiver loans made up 8% of the STACR 2020-HOA5 deal issued under the high-LTV HQA shelf, which had previously not included appraisal waiver loans (see Exhibit 3). CRT pools will also, over the coming years, include an increasing proportion of loans to lower-income borrowers if the new administration uses the GSEs to expand affordable housing.

Exhibit 3
The share of GSE CRT deals made up by loans with appraisal waivers has increased

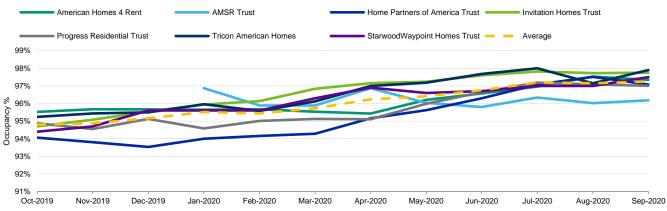
	Fannie Mae CAS 2020-	Fannie Mae CAS 2020-	Freddie Mac STACR	Freddie Mac STACR	Freddie Mac STACR	Freddie Mac STACR
	R01 G1	R02 G2	REMIC 2020- DNA1	REMIC 2020 - HQA2	REMIC 2020 - DNA5	REMIC 2020 - HQA5
Cut-off date	30/11/2019	30/11/2019	30/11/2019	31/1/2020	31/8/2020	30/9/2020
WA coupon	4.28%	4.18%	4.54%	4.14%	3.61%	3.49%
WA credit scores	750	743	752	750	758	752
LTV ratio	75%	92%	76%	92%	75%	91%
DTI ratio	36%	38%	36%	37%	34%	35%
Seasoning (months)	4	3	9	5	4	4
Rate/term refinance loans' share of pool	26%	17%	17%	14%	50%	39%
Cash-out refinance loans' share of pool	24%	0%	23%	1%	22%	0%
Appraisal waiver loans' share of pool	22%	5%	11%	0%	37%	8%

Columns highlighted in blue are post-COVID-19 securitization pools. Fannie Mae's CAS CRT platform has not issued any transactions since February 2020. Source: Moody's Investors Service

» **MI CRT:** In response to COVID-19, some MI providers who have instituted overlays to GSE underwriting guidelines will maintain them, at least until the economy normalizes. Such overlays include limiting cash-out refinancings and certain property types, such as manufactured housing and multi-unit properties. Some MI providers have also increased pricing to weed out weaker loans.

- » RPL: The inclusion of loans with COVID-19-related modifications will improve pool credit quality in new deals relative to prepandemic issuance because such modifications will likely perform better than those resulting from more persistent financial distress. Typically, loan performance of modifications for borrowers who have been hit by temporary shocks, such as a hurricane, outperform other types of modifications. However, COVID-19-tied modifications do not have a track record, creating performance uncertainty. Also supporting credit quality in 2021, transactions' share of post-crisis RPLs will rise as pre-crisis inventory shrinks. Post-crisis mortgage loans generally were underwritten with tighter credit requirements, including better income and asset documentation and more reserves than pre-crisis loans.
- » SFR: As tenants move to suburban areas and away from cities, the demand shift will support occupancy rates and cash flow to single-family rental sponsors, improving their ability to service debt. Even as COVID-19 fallout drives up rental delinquencies, income will likely remain adequate to cover debt service costs, with average debt service coverage ratios (DSCR) among shelves ranging from 1.3% to 2.1% in 2020. Average occupancy rates from March to September rose to over 97% from 95% before the pandemic's onset (see Exhibit 4). Also, the inclusion of newly constructed build-to-rent properties in SFR pools will be positive because the new construction will support property values and lower maintenance and capital expenditures. However, large numbers of such properties tend to be clustered in the same development, which may depress rental rates and decrease pools' diversity.

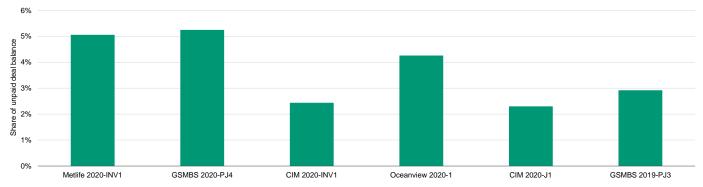
Exhibit 4
SFR occupancy rates have increased since the pandemic's onset
Occupancy rate, by SFR shelf



- » **Non-prime**: Non-prime lenders' more restrictive underwriting in response to COVID-19 will improve the credit quality of collateral. However, if enacted, proposals to allow loans with higher DTI ratios and looser income documentation to achieve qualified-mortgage (QM) status risk leading to more competition for better-quality non-prime loans that now qualify as QM, possibly resulting in lower quality among remaining non-prime collateral to be securitized.<sup>2</sup>
- » **Reverse mortgage:** The introduction of assignable active HECMs in pools increases the risk that excess spread will not accumulate to a level that is sufficient to repay over-issued notes because the assignment of loans acts as a prepayment.

» General theme for 2021 – driven by the pandemic, alternative valuations will remain elevated: As the prevalence of alternative valuations rises, so too will the use of appraisal waivers and, in some cases, the lack of on-site property condition checks. Prime jumbo exposure to loans with appraisal waivers has increased only marginally in 2020 (see Exhibit 5), though exposure has reached close to 40% in the recently issued STACR 2020-DNA5 GSE CRT deal. In addition, the pandemic has led to restrictions over inspections and interior appraisals, increasing some prime and GSE shelves' exposure to loans with field reviews and exterior-only appraisals. So far deals have had strong mitigants to offset the risk, such as strong lender underwriting practices and high quality secondary valuation products. Securitization third-party property value reviews are also relying more on alternative products, such as GSE collateral underwriting scores and automated valuation models (AVM) models instead of traditional appraisal desk reviews or broker price opinions, extending a trend that began before the pandemic.

Exhibit 5
Prime and expanded-prime deals' exposure to loans with appraisal waivers is overall below 5%
Loans with appraisal waivers as a share of transactions' unpaid balance



Source: Moody's Investors Service

#### Pandemic risks will continue to shape structural choices, with mostly positive credit effects

Structural mechanisms, such as triggers that mitigate costs by excluding COVID-19 loans from representation and warranty breach reviews and dynamic delinquency triggers, will protect notes from cash flow disruptions caused by pandemic-tied payment holidays (see structure trends in Exhibit 6). In addition, more expanded prime transactions will include sequential rather than shifting interest structures, increasing payments to and better protecting senior bonds. However, more highly leveraged SFR structures and larger voluntary substitution limits will pose additional risk.

Exhibit 6
Structure trends for 2021

	2021	2020
Prime jumbo	» As pandemic-tied risks remain, structural features will be stable.     » Some expanded prime transactions will continue to use sequential structures.	» Loans in payment holidays did not count toward representation-and-warranty breach-review triggers.      » More expanded prime transactions featured sequential structures with excess spread.
GSE CRT	» The GSEs will maintain standard structures, which effectively mitigate immediate losses from COVID-19-tied forbearance, unlike some fixed severity CRT deals issued in the past.	» All new deals were REMIC acutal loss synthetic transactions as the GSEs maintained their standard structures.
MI CRT	» Sponsors will maintain delinquency triggers while COVID-19 effects last.	» COVID-19-driven dynamic delinquency triggers benefited offered notes.
RPL	» Structures will be the same. COVID-19-tied deferrals in most cases will not trigger immediate losses for investors.	» Sponsors retained pre-COVID-19 structures because, except for one shelf, deals recognize deferred balances as a loss at liquidation and not at modification.
SFR	» As sponsors continue to increase voluntary substitution limits, risks will rise.	<ul> <li>Structures became riskier, reflecting higher deal-level leverage and JV sponsor arrangements, which result in a weaker alignment of interest between sponsors and investors.</li> <li>One transaction significantly increased the percentage of voluntary substitution.</li> </ul>
Non-prime	» Structures will be the same, protecting senior bonds and senior-mezzanine bonds.	» Sponsors maintained strong capital structures, with pro-rata payments among senior and senior-mezzanine bonds and sequential for subordinate bonds.
Reverse mortgage	» Sequential structures will continue to protect senior bonds.	» Structures remained sequential pay.

» **Prime jumbo:** Breach review triggers will not count COVID-19-tied temporary forbearance loans, avoiding high review expenses. To offer greater protection to investors, more sponsors of expanded prime transactions will likely use sequential structures with excess spread. Principal paydowns are faster for sequential structures, benefiting senior notes, compared with the shifting interest structures commonly used in prime transactions.

» MI CRT<sup>5</sup>: To avoid principal lockout on the offered notes due to COVID-19-related forbearance delinquencies, sponsors changed the formula for the delinquency trigger and made it harder to trip. New triggers will trip when delinquent balances reach 75% of senior credit enhancement (CE), pushing up thresholds by about one percentage point from the pre-COVID-19 static delinquency range of 4%-5% of the exposed principal balance (see Exhibit 7). For example, in Bellemeade Re 2020-1 Ltd., the first transaction to include the dynamic delinquency trigger, the trigger would trip if the proportion of delinquent loans exceeds 9.38% shortly after closing (increasing over time to 10.13% once the senior CE target is hit), compared with a static 4%-5% had it used the old trigger. In addition, in MI CRT structures, modifications do not trigger losses to investors unless the loan defaults. This is in contrast to actual-loss GSE CRT structures, which specifically allocate reduced interest from modifications as losses on an ongoing basis.

Exhibit 7

Delinquency trigger thresholds for post-COVID-19 MI CRT transactions

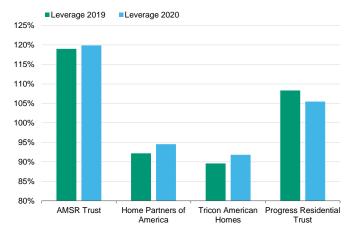
Delinquencies' share of current principal balance that will breach dynamic trigger thresholds

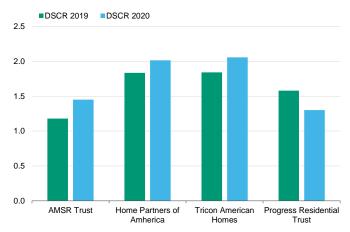
	DQ trigger threshold as of closing	DQ trigger threshold based on senior CE target
Bellemeade Re 2020-1 Ltd.	9.38%	10.13%
Bellemeade Re 2020-2 Ltd.	7.31%	8.06%
Bellemeade Re 2020-3 Ltd.	6.75%	7.50%
Radnor Re 2020-2 Ltd	4.88%	5.63%
Eagle Re 2020-2 Ltd.	4.69%	5.44%
Oaktown Re V Ltd.	4.50%	4.69%
Triangle Re 2020-1 Ltd	5.25%	6.00%
Home Re 2020-1 Ltd.	5.63%	6.19%

Source: Moody's Investors Service

» **SFR:** The strong housing market will continue to drive higher leverage<sup>6</sup> in most SFR transactions, leaving sponsors more vulnerable to economic shocks because they will have less equity in properties (see Exhibit 8). However, transaction structures will mitigate exposure to such shocks, with adequate DSCRs at origination and DSCR triggers that trap cash to pay noteholders once rental income falls below certain thresholds. More sponsors are joint venture (JV) funds, which may not have as strong incentives as traditional SFR operator sponsors to maintain properties through down markets. SFR structures will also include more optionality for sponsors to voluntarily substitute properties, driving concentration risk and potential adverse selection. For example, one recent deal allows 30% substitution, compared with a 5% maximum for previous transactions.

Exhibit 8
Average leverage levels and DSCR, by SFR sponsors
Examples of SFR shelves





Source: Moody's Investors Service

SEE CRT, non-prime, reverse and RPL: Structural changes are unlikely for these asset classes given that they already maintain structural mechanisms that do not cause immediate cash flow disruption from COVID-19 payment holidays. Examples of such mechanisms include a sequential payment waterfall or delay in recognizing potential losses from pandemic-tied relief plans or both. In GSE CRT transactions, delinquency triggers, if tripped, would, until cured, direct all principal payments to the senior notes. However, under our analysis of forcing the delinquency trigger to fail for 12 to 18 months, the credit impact to subordinated notes was minimal.

#### Issuance will rise in most RMBS sectors

For most product types, issuance will rise in 2021, as interest rates remain low, among other factors.

- » **Prime jumbo**: Strong refinancing activity will boost issuance, as will new issuers in the market. If QM rules expand to include weaker credits, issuance of expanded prime transactions will likely increase.
- » **GSE CRT:** Freddie Mac issuance will be stable. It is still uncertain whether Fannie Mae will resume issuance, which it ceased after its February 2020 CAS transaction.
- » **MI CRT:** Low interest rates will drive up issuance of new business. Furthermore, if Fannie Mae does not resume its CRT issuance, investor demand will shift to MI CRT.
- » **RPL:** Inclusion of loans with COVID-19-related modifications will drive up issuance from 2020 levels. Ginnie Mae servicers may start using private securitization to finance their early buyouts of delinquent loans from Ginnie Mae trusts.
- » **SFR:** Strong demand for single-family rental properties in many locations where housing affordability continues to decline and attractive refinancing rates for existing transactions will support issuance, which was already strong in 2020.
- » Non-prime: Tightened underwriting in response to the pandemic will continue to weigh down issuance.
- » **Reverse mortgage**: Issuance volume will be steady or increase as issuers refinance existing transactions and issue new ones to take advantage of favorable bond pricing.

#### COVID-19-tied defaults will weaken existing deal performance

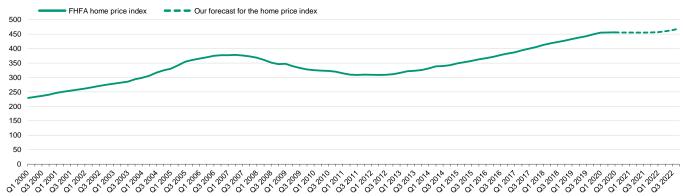
As COVID-19-tied payment holiday plans expire, borrowers who remain unable to service their debt will drive up defaults, though additional stimulus, if enacted, would help some restart payments. For stronger borrowers, the recovering economy will further bolster their ability to service debt and ongoing low interest rates will support high prepayments (see performance trends in Exhibit 9). We expect the unemployment to average 6.0% in 2021, down from 8.1% in 2020.

Exhibit 9
Performance trends for 2021

	2021	2020
Prime jumbo	» Low rates will continue to support prepayments.	» One month conditional prepayment rates (CPR) spiked to 50% in November 2020 from 25% at year-end 2019.
	» Borrower creditworthiness will keep defaults low, including among	,
	obligors in relief plans.	» Defaults were low due, in part, to payment holidays.
	» Modification losses will rise above historical ranges as payment	
	holidays expire, but remain lower than other product types.	
GSE CRT	» Low rates will continue to support prepayments.	» CPRs spiked to 32% in November 2020 from 15% at year-end 2019.
	» Modification losses will remain higher than prime jumbo.	» Defaults and losses were low due, in part, to payment holidays.
RPL	» Prepayments will remain elevated and benefit sequential pay deals,	» CPRs inceased to 15% in September from 10% at year-end 2019.
	the majority of issuance.	n Defaulte consideration for the format of the fide of
	» These borrowers will remain more likely to default post-modification.	» Defaults were low due, in part, to payment holidays.
	» Reimbursement mechanisms will prevent long-term interest shortfalls.	
SFR	» Cash flow will remain strong, reflecting pandemic-tied demand.	» Driven by the pandemic, vacancies dropped as rental demand rose,
	•	supporting cash flows.
	» Home values will support performance.	D00D
		» DSCRs remained well above trigger levels.
Legacy	» As borrowers continue to roll off relief plans, modification losses may	» Relief plans significantly drove up delinquencies, reflecting servicer reporting
	rise.	practices, among other factors, while foreclosure moratoriums kept losses low.
	» Defaults will increase among borrowers who continue to financially struggle.	» Borrowers started rolling off payment holiday plans. Transaction documents are silent on whether such modifications should be treated as losses.
	»Interest shortfall frequency will increase due to servicer advance recoupments.	

- » Payment holiday plans will continue to mitigate default risk across product types: Payment holiday plans will continue to provide meaningful support to mortgage borrowers, with programs applying to large monthly obligations and offering generous terms. However, such holidays result in payment disruptions to bonds and indicate increased likelihood that borrowers will be unable to make pre-COVID-19 payments, resulting in modification losses or defaults or both.
- » Flat home prices and declining unemployment will support performance: National home prices will be flat but remain near historically high levels after booming in recent months (see Exhibit 10), upholding borrowers' property equity and willingness to service their debt. However, even as unemployment declines, it will remain above pre-pandemic levels, hindering some borrowers' ability to make timely loan payments. If lawmakers approve additional income support payments, those funds would somewhat mitigate financial strains for unemployed obligors.

Exhibit 10 Home prices will remain close to historically high levels Home price index (Q1 1980 = 100)

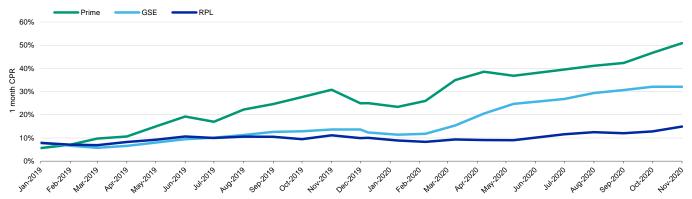


This index measures prices based on sales and appraisal data on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac. Sources: Federal Housing Finance Agency, Moody's Investors Service

» Low interest rates will drive high prepayments: Low rates will drive borrowers to refinance, bolstering prepayments. Such prepayments accrue the largest benefit in sequential structures, resulting in deleveraging and faster buildup of credit enhancement. Low rates will also help performance by keeping borrowers' adjustable debt payments affordable. Prepayment rates for prime jumbo and GSE collateral have increased sharply since the onset of the pandemic (see Exhibit 11).

Exhibit 11

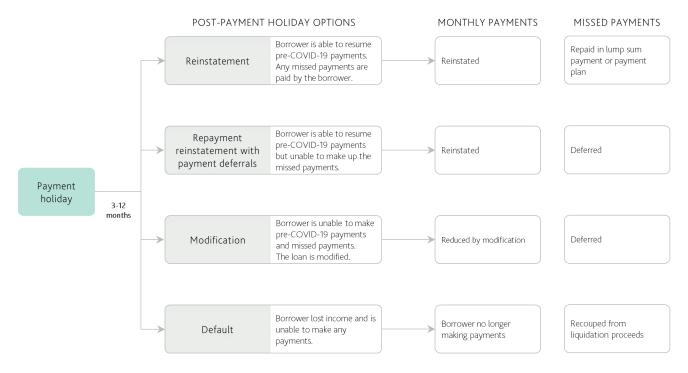
Prepayments have been elevated since the pandemic's onset
1-month prepayment rate across deals we rate, weighted average



Source: Moody's Investors Service, based on servicer data

- » Servicers will maintain focus on their COVID-19 responses: Servicers will offer various options to borrowers who are able to resume making pre-forbearance payments, posing varying performance risks (see Exhibit 12). Options include borrowers paying off the missed payments in one lump sum and servicers adding the missed amounts as a non-interest-bearing balloon payment due at the end of loan term. For borrowers who can no longer afford to make payments in line with original terms, servicers will likely modify the loan by lowering its rate, extending the term or forgiving a portion of the principal. Some will subsequently default despite modifications. Additionally, servicers will resume foreclosures upon the expiration of moratoriums.
- » Servicers' inconsistent COVID-19 strategies, reporting dilute performance transparency. Loan status categorization for borrowers in COVID-19 payment holiday programs is inconsistent among private-label securitization (PLS) servicers, increasing the likelihood that remittance reports are masking underlying trends. Also, the application of losses varies among deals and depends on transaction document provisions and servicer practices.<sup>9</sup>

Exhibit 12
Post-payment holiday options will depend on the borrower's financial condition



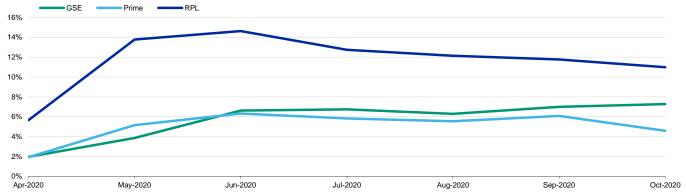
- » Potentially longer foreclosure timelines will increase severities. Longer foreclosure timelines resulting from moratoriums will risk resulting in increased severities as servicers work through a backlog. Extended foreclosure timelines will delay recoveries for US RMBS, especially for loans backed by collateral in judicial states, which take longer than nonjudicial states. However, home price appreciation has been strong for most borrowers, increasing home equity, which will mitigate much of this risk. Borrowers' home equity also makes a short sale a more attractive alternative to a foreclosure.
- » **Prime jumbo**: Strong borrower creditworthiness will keep defaults at a minimal level. However, modification losses for deals with documentation that requires servicers to recognize modifications as a loss will tick above the low levels of the last few years, but remain well below the levels observed during the global financial crisis. If COVID-19-tied extensions or new payment holiday plans rise, the risk of cash flow interruptions will, too. Also, for transactions with higher shares of self-employed borrowers, the likelihood of disruptions in interest cash flow and defaults is higher.
- » **GSE CRT:** Creditworthiness for borrowers in these pools is slightly lower than for prime jumbo, making these transactions more likely to incur modification losses and defaults as obligors roll off relief plans. Relief plans for these borrowers span about 12 months, double the term for prime jumbo obligors, pushing back the roll off period to next year. However, the worsening in performance will likely be modest unless the pandemic drives a fresh economic contraction. Payment holidays result in increased reported delinquencies, and while most fixed-severity transactions provide a grace period for loans that are affected by a "natural disaster," some pre-2015 deals do not and will prompt losses when the loans become 180 days or more delinquent. <sup>10</sup> Additionally, transactions contain a significant portion of loans with mortgage insurance, which will continue to insulate investors from losses.
- » MI CRT: Collateral performance drivers in 2021 will be similar to GSE CRT transactions, with the exception that MI CRT transactions do not incur modification losses. Additionally, MI CRT structures will perform better than GSE CRT due to structural features such as shorter maturity.

» RPL: Borrowers in these pools will likely struggle more to make post-modification payments than those with a clean payment history, though many of these deals benefit from substantial seasoning, mitigating default risks. If the proportion of borrowers enrolled in payment relief programs remains elevated, disrupted cash flow will result in higher interest shortfalls to bondholders. When shortfalls occur on higher priority subordinate bonds, the more subordinate bond interest shortfalls will increase and be prolonged as subsequent interest collections are diverted to repay the senior bonds firsts. The proportion of borrowers making partial or no payments has sharply increased since COVID-19's onset for RPL (see Exhibit 13). Even though RPL transactions do not benefit from servicer advances, most shortfalls will be temporary because RPL interest recoupment mechanisms allow for a preferential repayment order.

Exhibit 13

Non-cash-flowing RPL loans have increased relatively more since COVID-19's onset

Proportion of borrowers making partial or no payments as a percentage of current balance, by asset class



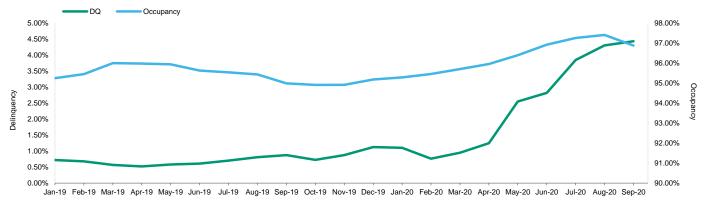
Sources: Moody's Investors Service, Moody's Analytics

» **SFR**: Higher rental demand will support collections and performance. Debt service coverage ratios and yields will remain above the covenant triggers. Also, deals' geographical diversification and robust national home prices will continue to mitigate home price declines in certain areas. Throughout the pandemic, modest delinquency increases (see Exhibit 14) did not disrupt cash flow to bondholders.

Exhibit 14

SFR delinquencies have increased since the pandemic's onset but remain low

Average delinquency and occupancy rates among transactions we rate



Source: Moody's Investors Service, based on servicer data

» **Legacy RMBS:** Borrowers who continue to financially struggle once their COVID-19-tied payment holiday plans expire will spur losses and defaults, though additional stimulus, if enacted, would aid subprime and Alt-A obligor finances. Weak interest recoupment mechanisms among many subordinate and mezzanine classes in subprime and Alt-A transactions will continue to pose interest shortfall risks to bondholders.

- » **Esoteric RMBS**: Additional liquidation moratoriums would weaken nonperforming reverse mortgage performance. Risks and mitigants affecting other product types will also play a role for nonperforming reverse mortgage deals.
- » **Delay in Libor's expiration will give market participants further time to address challenges:** Libor's administrator, ICE Benchmark Administration Limited, recently announced its request for feedback about whether to delay the expiration of certain key US dollar Libor maturities to June 2023. Previously, the market had expected Libor to phase out by the end of 2021. Such a delay would give market participants further time to address the challenges of legacy Libor exposure. US regulators said the delay only pertains to outstanding transactions and that banks should stop using Libor in new contracts and switch to an alternative by the end of 2021. The additional time for outstanding transactions will increase market confidence in the development and comparability of Libor replacements. As the expiration of Libor approaches, transactions with strong fallback language, such as most post-crisis prime jumbo and GSE CRT transactions, will be better insulated from basis mismatch and potential cash flow disruptions. However, most RMBS documentation, especially for legacy deals, does not easily allow for such a transition. In these cases, if the bond's reference rates become fixed, the risk of rate mismatches between assets and liabilities will rise, potentially leading to interest shortfalls or losses on bonds. Market participants will continue to pay increasing attention to potential risks from Libor transitioning.

#### Several global credit themes will affect US RMBS in 2021

In the table below, we highlight ways in which five global credit themes will affect US RMBS in 2021. We expect these themes to shape global credit next year. For more information on the themes, see the graphic on the next page of this report or visit tbp.moodys.io.



#### **SOCIAL TRENDS**

- » COVID-19 fallout will increase delinquency and modification rates, increase default risk and extend foreclosure timelines, weakening the performance of some RMBS.
- Payment holiday plans will continue to provide meaningful support to borrowers. However, such holidays will also result in payment disruptions to bonds.



#### **POLICY CHALLENGES**

- » Efforts by the new administration to expand home ownership and new QM rules may weaken the credit quality of some transactions.
- » The timing of the transition away from GSE conservatorship is uncertain, reflecting the change in administration.



#### **RISING DEBT BURDENS**

- » Loss of income due to the pandemic will reduce some borrowers' ability to make debt payments.
- » Historically low interest rates will support debt affordability and prepayments, resulting in lower default risk and increased credit enhancement for some bonds.



#### **DIGITAL TRANSFORMATION**

Increasing use of automated valuation tools will potentially increase collateral risks.



#### **ENVIRONMENTAL IMPACT**

- Natural disasters are becoming more common, increasing the likelihood of delinquency.
- Structural features, such as strong interest repayment mechanisms and natural disaster exceptions in GSE CRT transactions, will continue to mitigate these short-term shocks.

### Six themes will shape global credit in 2021

#### Policy challenges

Prospects of an unwinding of extraordinary fiscal support measures will create credit risks; geopolitical and trade tensions, especially between the US and China, will be a top policy focus

#### Digital transformation

Growth of digital service delivery, e-commerce and remote work will accelerate changes in sectors such as retail, healthcare, education, banking and commercial real estate

#### Social trends

Public health and safety issues stemming from the coronavirus, growing inequality, demographic trends and other social challenges will have substantial credit implications



#### Uneven recovery

Recovery from the unprecedented economic shock of the coronavirus will be tenuous and inconsistent across countries, regions and sectors

#### Rising debt burdens

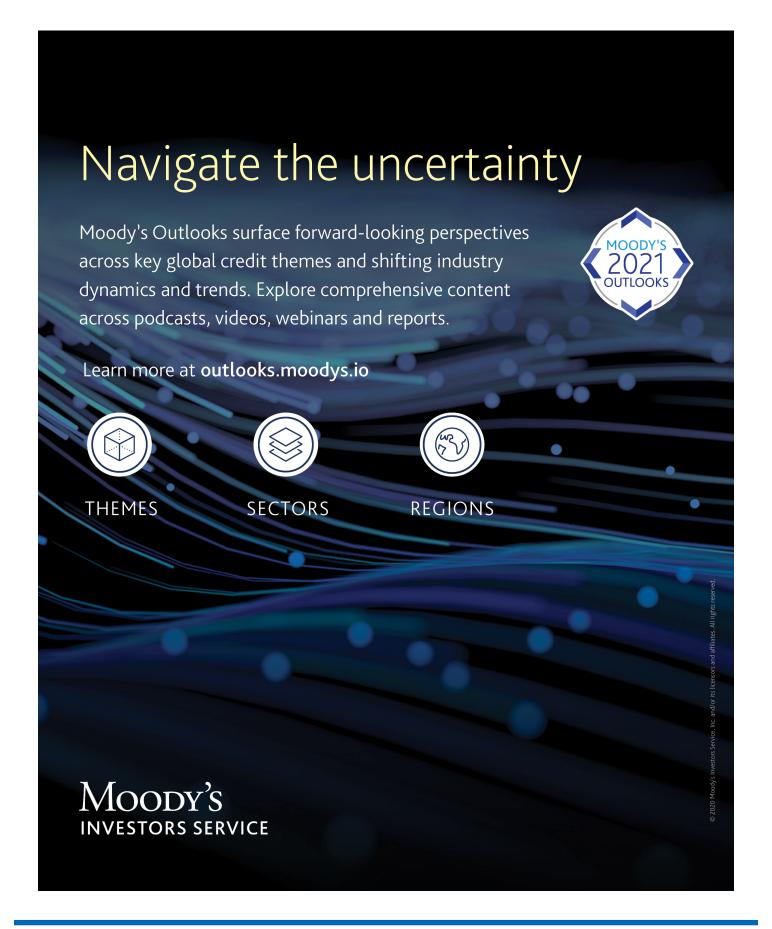
Weak earnings and more solvency concerns will weigh on hard-hit companies and governments; higher debt levels and more relaxed underwriting will erode the positive effects of low interest rates on debt servicing capacity

#### **Environmental impact**

The consequences of climate change will require increased adaptation and mitigation efforts, with wide-ranging effects on governments and companies

#### Moody's related publications

- » RMBS US: Most US RMBS have weak Libor documentation, structures lessen Libor-phaseout risk, 17 September 2020
- » Credit Conditions US: Next administration will confront five policy challenges with wide-ranging credit impact, 5 October 2020
- » RMBS US: Elevated by COVID-19, non-cash-flowing loans continue to pose bond risks, 16 October 2020
- » RMBS & Small Business Loan ABS US: COVID-19-tied foreclosure moratoriums will continue to delay deal recoveries, 19 October 2020



#### **Endnotes**

1 On 12 August 2020, Fannie Mae and Freddie Mac announced that the cost to originate and deliver single-family limited cash-out refinances and cash-out refinance mortgage loans would increase by 50 basis points. Scheduled to begin in December, the addition of this fee will likely discourage refinance activities.

- 2 The Consumer Financial Protection Bureau has proposed revising the QM definition and potentially replacing the 43% DTI limit with a price-based threshold. Some lenders and aggregators have refrained from making or buying non-QM loans because of potential legal liability.
- 3 In 2020, expanded prime transactions Citigroup Mortgage Loan Trust Inc. 2020-EXP1 and Oceanview Mortgage Loan Trust 2020-1 used sequential
- 4 If reviews included forbearance loans, higher costs would either reduce the net weighted average coupon (WAC) or lead to subordinate principal write-downs.
- 5 MI CRT transaction structures largely replicate GSE CRT deals. MI providers hedge their mortgage exposure and obtain capital relief by synthetically transferring a portion of the credit risk to the capital markets through issuing subordinate and retaining senior notes. While the senior note is outstanding and no delinquency trigger events occur, the transaction structure allocates principal payments on a pro rata basis between the senior and subordinate notes. Otherwise, principal payments are only made to the senior notes
- 6 Leverage is LTV of the portfolio, calculated as allocated loan amount divided by aggregate broker price opinion value of the properties.
- 7 JV sponsors typically do not own the property manager in the transaction. When the sponsor owns the properties and wholly owns the manager, strong economic incentives will lead it to invest its own money to maintain the properties. Also, JV partners could potentially sell their interests to entities with less financial wherewithal.
- 8 Additionally, transaction documents that treat loan forgiveness as modifications will increase deal losses.
- 9 See RMBS US: Servicers' inconsistent COVID-19 strategies, reporting dilute performance transparency, 20 July 2020.
- 10 See RMBS US: Coronavirus-tied loan forbearance will spur losses on certain credit risk transfer deals, 14 April 2020.
- 11 See RMBS US: Most US RMBS have weak Libor documentation, structures lessen Libor phaseout risk, 17 September 2020. On the asset side, we anticipate servicers will update systems and outreach to customers, including education about adjustable rate mortgages.

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19