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New Issue

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Paragon Mortgages (No. 28) PLC

New Issue - Paragon Mortgages Group issues 28th Paragon Mortgages UK buy-to-let RMBS

Capital structure

Exhibit 1
Definitive ratings

Series	Rating	Amount (million)	% of assets	Legal final maturity	Coupon*	Subordi-nation**	Reserve fund ***	Total credit enhancement****
Class A	Aaa (sf)	£623.81	86.50%	Dec-2047	SONIA+0.95%	13.50%	1.46%	14.96%
Class B	Aa1 (sf)	£39.66	5.50%	Dec-2047	SONIA+1.35%	8.00%	1.46%	9.46%
Class C	Aa3 (sf)	£21.64	3.00%	Dec-2047	SONIA+1.65%	5.00%	0.08%	5.08%
Class D	Baa1 (sf)	£18.03	2.50%	Dec-2047	SONIA+1.95%	2.50%	0.08%	2.58%
Class Z	NR	£18.03	2.50%	Dec-2047	SONIA+2.95%	0.00%	0.00%	0.00%
Total		£721.17	100.00%					

* Compounded daily Sterling Overnight Index Average rate ("SONIA"). On each quarterly interest payment date, the coupon on the notes is calculated by compounding the daily SONIA rate for the calculation period. On the interest payment date falling in December 2025, the margin payable on Class A to D notes will increase. Interest payable on Class B, C, D and Z notes is deferrable with interest accruing on deferred payments at a rate equal to SONIA plus the relevant margin shown in the table above as long as such notes are not the most senior outstanding class of notes.
** Subordination is as a % of the asset pool at closing.
*** The reserve funds are as a % of the asset pool at closing. They are amortising subject to compliance with certain triggers and with no floor.
**** Does not include the benefit of excess spread. Class A to Z sums to 100% of the asset pool at closing.
Source: Moody's Investors Service

Summary

This transaction is a static securitisation of buy-to-let (BTL) mortgage loans extended to borrowers in the UK. Paragon is a regular issuer in the UK BTL sector. The transaction is backed exclusively by BTL mortgage loans originated by members of the Paragon Banking Group (Paragon).

As of the cut-off date of 30 October 2020, the closing portfolio consisted of loans secured by mortgages on residential properties in the UK extended to 2,663 borrowers for BTL purposes. The pool balance is £720.1 million.

Credit strengths

The following factors were the strongest features of this transaction:

» ***Asset quality***:

– *No prior adverse credit:* None of the borrowers in the securitised pool has been subject to any personal bankruptcy, individual voluntary arrangements or country court judgements (see "Asset analysis - Comparables").

– *Originator's long origination history*: The originator has provided historical information since 1996 and has an extensive track record of operating in its market segment. Analysis shows that the performance of its securitisations has been better than the average in the UK BTL sector (see "Asset analysis - Comparables").

– *Weighted average (WA) loan-to-value (LTV) ratio*: The pool has a current weighted average LTV ratio of 71.5%, with no loans with WA LTV ratios higher than 90% (see "Asset analysis - Comparables").

– *Property valuations*: At origination, a surveyor has performed a full valuation of the property and has included three comparables in the valuation report. Desktop valuations or valuations produced using an automated valuation model are used to check the full valuation provided by the surveyor (see "Asset analysis - Comparables").

– *No loans in arrears*: None of the loans is in arrears in the securitised pool.

» ***Structure*:**

– *Two amortising reserve funds*: The deal benefits from two amortising reserve funds sized on aggregate at closing at 1.5% of the rated notes. One reserve fund equals 1.5% of Class A and Class B notes' outstanding principal amount and is dedicated solely to provide liquidity to Class A and Class B notes, and cover senior expenses. The other reserve fund is available for all the rated notes and senior expenses and it is sized as a percentage of Class C and Class D notes' outstanding principal amount. The reserve funds will amortise sequentially except if there has been a required amount trigger event (see "Securitisation structure description - Detailed description of the structure - Reserve fund").

– *Protection of yield through swap:* 100.0% of the pool consists of fixed-rate loans, which will reset to the seller's standard variable rate (SVR). The fixed-floating mismatch between these assets and the notes is mitigated by a fixed-floating swap, provided by Lloyds Bank Corporate Markets Plc (A1/P-1; A1(cr)/P-1(cr)) (see "Securitisation structure analysis - Primary structural analysis - Spread compression").

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Credit challenges

The transaction contains the following challenges:

» ***Risk of margin compression:*** The spread could potentially compress in the transaction because of the following reasons:

 – *Unhedged SVR exposure:* This could lead to a decrease in the average yield on the whole pool of loans during the life of the transaction. However, Paragon has the obligation to ensure a minimum WA spread of 3.0% over SONIA (after taking into account swap payments and any funds standing to the credit of the Mortgage Margin Reserve Fund) is maintained at all times.

 – *Product switches:* The transaction allows for unlimited product switches, subject to certain conditions, before the step-up date in December 2025. Upon a product switch, the issuer will, within 30 days, enter into an additional swap agreement to hedge the fixed-floating interest rate exposure in relation to such converted mortgage only if and when the notes become under- or overhedged by more than £10.0 million. This feature could lead to further spread compression (see "Securitisation structure analysis - Primary structural analysis - Spread compression").

» ***Further advances:*** The transaction allows for the purchase of mandatory further advances at any time. In mitigation, such purchases are subject to certain asset and performance conditions. Other loans may also be granted discretionary further advances (see "Asset description - Eligibility criteria - Further advances").

» ***Affordability of mortgage payments***: About 93.7% of loans have been advanced on an interest-only (IO) basis. There is a risk that IO borrowers could have more stretched finances and the result of the Financial Conduct Authority's (FCA) mortgage market review could limit refinancing opportunities for such borrowers (see "Asset analysis - Comparables").

» ***Servicing disruption risk****:* The servicers/administrators are not rated by us. The transaction is therefore exposed to financial disruption risk. This risk is mitigated by the fact that there is a backup servicer/administrator, Homeloan Management Limited (not rated), appointed at closing. Furthermore, the backup servicing facilitator, Maples Fiduciary Services (UK) Limited), undertakes to facilitate the search for a suitable backup servicer/administrator in case either the original servicer or administrator is terminated from its role (see "Securitisation structure analysis - Additional structural analysis - Mitigating servicing disruptions").

» ***Receiver of rent***: Paragon Banking Group uses a receiver of rent as a means of controlling arrears and losses. We believe that should the house prices weaken significantly, it could lead to an increase in loss severities. In a severe recession, a receiver of rent may be unable to successfully re-let a vacant property and so repossession would occur in any case but with a lag and increased loss severity. Additionally, excess spread can leak out of the transaction instead of covering losses and amortising the notes down, as in the case of repossession. Finally, this is an operationally more complex method of resolving payment problems compared with attempting to foreclose sooner, which could be compounded in cases where the servicer itself is under financial pressure (see "Primary asset analysis - Additional asset analysis - Receiver of rent").

» ***Current economic uncertainty***: The coronavirus outbreak, the government measures put in place to contain it, and the weak global economic outlook continue to disrupt economies and credit markets across sectors and regions. Our analysis has considered the effect on the performance of consumer assets from the current weak UK economic activity and a gradual recovery for the coming months. Although an economic recovery is underway, it is tenuous and its continuation will be closely tied to containment of the virus. As a result, the degree of uncertainty around our forecasts is unusually high. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

ESG considerations

Except with respect to the coronavirus outbreak, which we consider a social risk as described below, in general, we consider ESG risks to be low. Environmental risk is low, based on pool diversification and the presence of insurance, which mitigates many risks from natural disasters. For regional concentrations, our model applies an adjustment depending on the degree of concentration. Social risk is moderate, based on the effects of the coronavirus and the likelihood of governmental efforts to alleviate burdens to mortgage borrowers in times of stress, which, in some cases, can negatively impact loan performance or cash flows. Governance risk is low based on a number of transactional features that support the integrity of the transaction's operations for the benefit of investors. Please refer to our Cross-Sector Rating Methodology: General Principles for Assessing Environmental, Social and Governance Risks, 9 January 2019, which explains our general principles for assessing ESG risks in our credit analysis globally.

» ***Environmental:*** We consider this transaction to have low environmental risk, driven by the pool's geographic diversification and the presence of insurance, which is likely to mitigate much of the negative effects of future natural disasters. Nevertheless, disaster types that frequently lack insurance coverage, such as earthquakes and flooding outside of specified zones could increase defaults and losses on affected loans, should they occur. (See Asset description— Additional asset analysis- ESG Environmental considerations)

» ***Social:*** We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. Our analysis has considered the increased uncertainty relating to the effect of the coronavirus outbreak on the EMEA economy as well as the effects that the announced measures by governments will have on the performance of the RMBS sector. Specifically, for RMBS, home loan performance could weaken due to an increase in unemployment rate or other factors that may limit the borrower's income and their ability to service debt. The softening of property prices due to lower demand, among other factors, will reduce recoveries on defaulted loans, also a credit negative. Furthermore, borrower assistance programs to affected borrowers, such as payment holidays, may adversely impact scheduled cash flows to bondholders. Also, policymakers may limit creditors' right to initiate mortgage foreclosures, since housing is a key social concern, which would negatively affect recovery rates on the assets. (See Asset description—Additional asset analysis- ESG-Social considerations)

» ***Governance:*** Governance risks for this transaction are low based on the presence of transaction features such as risk retention, comprehensive agreed upon procedures (AUPs) report and R&W enforcement.(See Additional structural analysis—Additional structural analysis- ESG-Governance considerations)

Key characteristics

Exhibit 2
Asset characteristics
(securitised pool, cut-off date of 30 October 2020)

Issuer	Paragon Mortgages (No. 28) PLC
Seller:	Paragon Mortgages 2010 Limited (“PML”, NR) and Paragon Bank plc (“PB”), wholly owned subsidiaries of Paragon Banking Group (“Paragon”, NR)
Originators:	Paragon Mortgages 2010 Limited (“PML”, NR) and Paragon Bank plc (“PB”), wholly owned subsidiaries of Paragon Banking Group (“Paragon”, NR)
Servicers and legal title holders:	PML and PB
Receivables:	First-lien (or first and second lien) buy-to-let loans to individuals secured by property located in the UK
Methodology used:	Moody's Approach to Rating RMBS Using the MILAN Framework, May 2020 (1228742)
Total amount:	£ 720,119,714
Number of borrowers:	2,663
Borrower concentration:	Top 20 borrowers make up 7.3%
WA remaining term:	21.3 years
WA seasoning:	0.5 years
Interest basis:	100.0% fixed rate loans resetting to SVR (31.0%) and SVR-0.75% (69.0%)
WA current LTV:	71.5%
WA original LTV:	71.7%
Moody's calculated WA indexed LTV:	70.6%
Borrower credit profile:	Prime borrowers
Delinquency status:	0.0% in arrears more 90 days

Source: Paragon Mortgages (No.28) PLC

Exhibit 3

Securitisation structure characteristics

Issuer:	Paragon Mortgages (No.28) PLC
Issuer administrator / Corporate service provider:	Maples Fiduciary Services (UK) Limited (NR)
Models used:	MILAN (UK Settings), ABSROM
Excess spread at closing:	1.7% at closing
Back-up servicer(s):	Each servicer agrees to act for the other servicer in case of servicing interruption. Furthermore Homeloan Management Limited (HML,NR) is the back-up servicer.
Back-up servicer facilitator:	Maples Fiduciary Services (UK) Limited (NR)
Cash manager:	PML
Back-up cash manager:	Homeloan Management Limited (NR)
Principal paying agent:	Citibank, N.A., London Branch (Aa3/(P)P-1; Aa3(cr)/P-1(cr))
Issuer account bank:	Citibank, N.A., London Branch (Aa3/(P)P-1; Aa3(cr)/P-1(cr))
Collection account banks:	Barclays Bank PLC (A1/P-1; A1(cr)/P-1(cr)) for PML; and NatWest Bank PLC (A1/P-1 deposit rating; Aa3(cr)/P-1(cr)) for PB
Trustee:	Citicorp Trustee Company Limited (NR)
Arrangers:	Lloyds Bank Corporate Markets plc (A1/P-1; A1(cr)/P-1(cr)) and Merrill Lynch International (NR)
Swap provider:	Lloyds Bank Corporate Markets Plc (A1/P-1; A1(cr)/P-1(cr))
Credit enhancements/reserves:	At closing the two reserve funds will be funded with the proceeds of the Class S notes. The Class A and Class B Liquidity Reserve initially is funded to 1.5% of Classes A and B. The General Reserve is funded to 1.5% of Class C and D notes. Both reserve funds are sequentially amortising.
Form of liquidity:	The Class A and Class B Liquidity Reserve (solely for Class A and Class B notes interest; senior fees, excluding PDL); the General Reserve (for Class A to D notes, and senior fees, excluding PDL); principal to pay interest (only for A and B notes).
Number of interest payments covered by liquidity:	The cash reserves amount provide around 19.3 months of liquidity assuming a SONIA rate of 5.7%
Interest payments:	Quarterly in arrears on each payment date
Principal payments:	Pass-through on each payment date
Payment dates:	15th of December, March, June and September
First payment date:	15th December 2020
Hedging arrangements:	There is fixed-floating swap hedging for the fixed portion of the pool. The fixed/floating hedge will adjust to hedge the current fixed rate portion of the portfolio, with a tolerance margin of £10million above/below such balance to retain conversion loans (not as a general limit).

Source: Paragon Mortgages (No.28) PLC

Asset description

The assets backing the notes are first-ranking prime BTL mortgage loans originated by the sellers under the trading name of Paragon Banking Group. All the loans in the pool are secured on residential properties in the UK; Exhibits 4-7 detail additional high-level information regarding the assets in the pool.

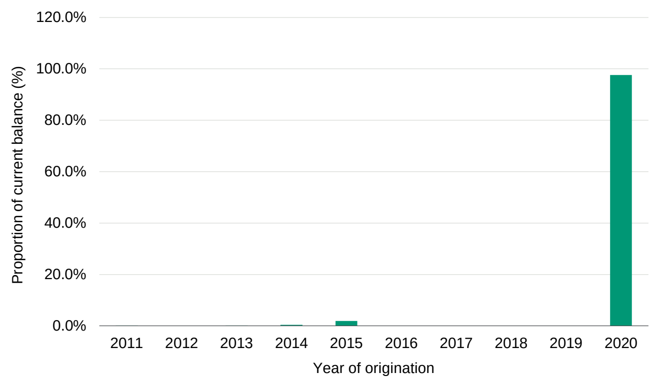
Asset description as of the portfolio cut-off date

The securitised pool cut-off date is 30 October 2020.

Pool characteristics

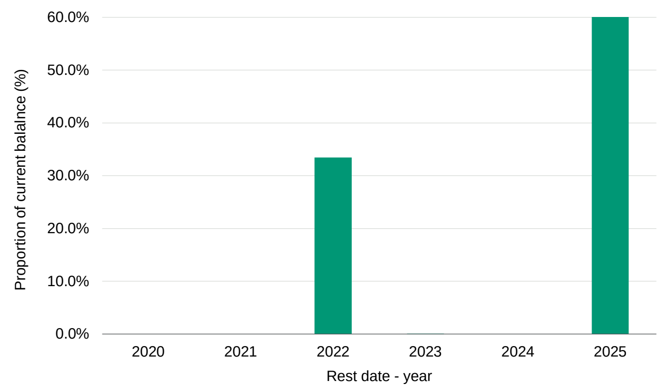
Exhibit 4 illustrates that more than two-thirds of the loans in the pool (97.7%) were originated in 2020, and 2.3% were originated before 2020. Exhibit 5 highlights the time when the fixed-rate portion of the portfolio will reset, with 66.5% of the fixed-rate mortgage loans in the pool switching to floating rate in 2024 and 2025. The entire fixed portion of the pool will reset to a floating rate in 3.6 years on average.

Exhibit 4
Portfolio breakdown by date of origination



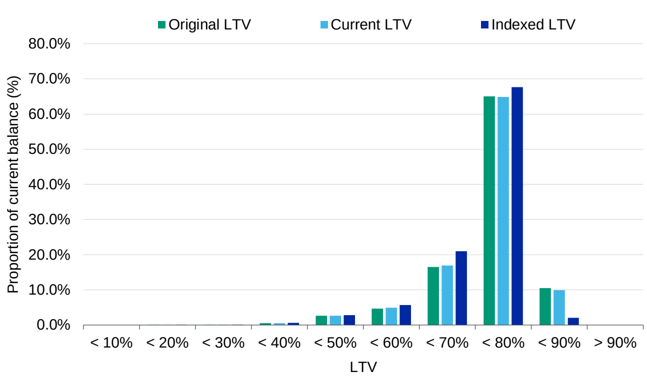
Sources: Paragon Mortgages (No.28) PLC, Paragon Banking Group

Exhibit 5
Fixed-rate portfolio breakdown by year of reset



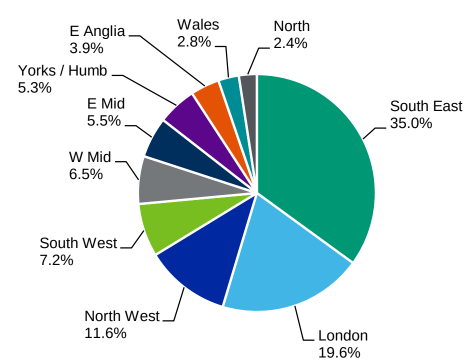
Sources: Paragon Mortgages (No.28) PLC, Paragon Banking Group

Exhibit 6
Portfolio breakdown by current/indexed LTV ratio



Sources: Paragon Mortgages (No.28) PLC, Paragon Banking Group

Exhibit 7
Portfolio breakdown by geography



Sources: Paragon Mortgages (No.28) PLC, Paragon Banking Group

The WA LTV ratio of the pool is 71.5%, and Exhibit 6 shows that more than half of the pool (64.9%) has a current LTV ratio of 70%-80%. Around 35.0% of the loans are concentrated in the South East region, as Exhibit 7 shows, and 19.6% of the pool is concentrated in the London region. As is fairly common for this type of portfolios, there are some material borrower concentrations because the borrowers tend to have multiple properties. In this portfolio, the top 20 borrowers represent 7.3% of the pool.

Originator/servicer

The sellers, Paragon Bank Plc and Paragon Mortgages (2010) Limited (PML), are part of the Paragon Banking Group (neither seller is rated). PML is an origination vehicle, established in 2010, while Paragon Bank Plc is a bank licensed to take deposits and provide finance including regulated consumer credit. Paragon Bank Plc is authorised and regulated by the Prudential Regulation Authority (PRA) and the FCA, and is the parent company of Paragon Mortgage (2010) Ltd.

All the loans securitised were originated under the Paragon brand. Paragon Banking Group provides mostly BTL loans to professional landlords, who are borrowers with portfolios of properties. Therefore, there is above-average borrower concentration in the pool.

The sellers are also the servicers and cash administrators of the transaction, with PML taking the primary lead as the Administrator. They have agreed to take on each other's role in case of servicing disruption by the other party.

Further information regarding the servicer and originator, including our originator and servicer reviews, can be found in Appendix 3.

This is Paragon Group's 33rd securitisation transaction to include BTL loans.

Eligibility criteria

The sellers provide the seller asset warranties, which, if not met, mean that the loans need to be repurchased. All loans upon entry in the portfolio must meet the following asset acquisition guidelines (*inter alia*):

» Each loan constitutes a valid and binding obligation of the borrower if:

- it is a first legal charge over the property;
- both the first and second legal charges are in the same portfolio;

» Properties are either residential or mixed residential/commercial use;

» All steps to perfect legal title have been taken or are being taken, with no delay after origination;

» Before granting initial loans or further advances, the sellers' lending guidelines were adhered to;

» Each loan has a term ending no later than 31 October 2045;

» The property securing the mortgage(s) is in England or Wales;

» No borrower is an employee or director of Paragon;

» Each loan was, at the time of origination and continues to be denominated, in sterling;

» Before making an initial mortgage loan, a valuation is made either by a valuation by the seller's valuer or a valuer appointed on the seller's behalf. Further advances may be made using indexed valuations.

Loan amendments (product switches)

Amendments of loans in the pool are possible only in relation to interest rate conversions (to change the basis upon which the interest rate is charged) and repayment terms (to change from IO or part to repayment only).

Interest rate conversions are subject to the following conditions:

» No unremedied event of default has occurred at the time of the proposed conversion;

» There are no other material changes to the terms of the mortgage documentation;

» Where the loan is to be converted to a fixed-rate loan, the administrator will within 30 days enter into a fixed-floating hedge and the WA swap rate does not exceed 4.0%;

» The hedging corridor of under/over-hedging (£10,000,000) has been met;

» The borrower under such loan is not more than a month in arrears;

» The conversion takes place on or before the step-up date;

» The conversion margin reserve fund has sufficient funds to ensure that the issuers' available revenue receipts are not reduced by the conversion;

» No administrator termination event has taken place.

PML, as the administrator, may also on each interest payment date debit the revenue ledger and credit a discretionary reserve fund (the "Conversion MRF Discretionary Fund") in accordance with the Revenue Priority of Payments to fund the amounts required for future conversions. Such amounts can be used, *inter alia*, to ensure that the effect of the conversion is that the issuer does not receive less revenue receipts in respect of such interest rate conversions.

Repayment conversions are permitted too, subject to a cap of 10% of the mortgage portfolio.

Further advances

Certain loans in the pool have mandatory further advances, for example, loans where the properties are undergoing repair or renovation. Other loans may be granted discretionary further advances. Mandatory further advances are granted at any time and funded first from the MFA Pre-Funding Reserve Ledger and then from the issuer's own principal receipts.

The MFA Pre-Funding Reserve Ledger has been funded at closing in an amount equal to 0.14% of the initial principal amount of the notes. The servicer will debit the necessary amounts from the MFA Pre-Funding Reserve Ledger on the relevant date and will credit such amounts to the principal ledger to fund any mandatory further advances.

Discretionary further advances can only be granted subject to certain conditions:

» There is a Principal Deficiency Ledger ("PDL") balance equal to zero;

» The General Reserve Fund is at least equal to the General Reserve Fund required amount on the following Interest Payment Date ("IPD");

» Any such further advance many only be made if it is secured on the relevant property;

» The outstanding balance of three months' arrears is lower than 2.0%;

» The WA current LTV does not exceed 77.0%;

» The outstanding balance of the top 20 borrowers does not exceed £55,000,000.

Asset analysis

Primary asset analysis

The first step in the analysis of the credit quality of the pool is to determine a loss distribution of the mortgages to be securitised. To determine the shape of the curve, two parameters are needed: the expected loss and the volatility around this expected loss. These parameters are derived from two important sources: historical loss data and the MILAN loan-by-loan model.

Expected loss

We use performance data provided by the originator in addition to other relevant data to extrapolate expected losses for the loan pool. Examples of data include market- and sector-wide performance data, the performance of other securitisations and other originators' data.

The expected loss of 1.25%, which is among the lowest in the UK BTL sector, is driven by (1) the seller's extensive experience in the BTL sector, (2) the performance of the seller's precedent transactions as well as the historical performance of the seller's loan book, (3) the fact that around 93.7% of the pool are IO loans, and (4) benchmarking with other UK BTL transactions.

MILAN model

To obtain the volatility under stressed scenarios, we take into account historical data. However, historical volatility may not be significant (given insufficient data points or incomplete data), and in addition, may not be representative of the future because it is based on the previous economic environments experienced.

Consequently, we determine a number representing the enhancement that would be required for a pool of mortgages to obtain a rating consistent with the local country ceiling for United Kingdom (Aaa) under highly stressed conditions. The MILAN CE is produced by using a loan-by-loan model, which looks at each loan in the pool individually, and based on its individual characteristics such as the LTV ratio or other identified risk drivers, will produce a benchmark CE number. This assumes stressed recovery rates (through house price decline), time to recovery, interest rates and costs to foreclosure. The WA benchmark CE number will then be adjusted according to positive and negative characteristics of each loan or of the pool as a whole to produce the MILAN CE number.

The MILAN CE for this pool is 11.5%, which is among the lowest in the UK BTL sector and it is driven by (1) the historical performance of the pool (100.0% of the pool has never been in arrears), (2) the current WA LTV ratio of 71.5%, (3) the fact that around 93.7% of the pool are IO loans, (4) the potential changes to the initial pool because of product switches, (5) the possibility for the borrowers to request further advances, and (6) benchmarking with other UK BTL transactions.

Lognormal distribution

The MILAN CE number and the expected loss number are based on Rating Committee discussions and are used to derive the lognormal distribution of the pool losses. Because of the large number of loans and supporting historical data, we use a continuous distribution to approximate the loss distribution.

The standard deviation of the distribution is found by setting the expected loss of the area of the lognormal distribution beyond the MILAN CE equal to the expected loss that is consistent with the idealised expected loss of a Aaa tranche.

Risk of yield compression

The whole pool currently comprises of fixed-rate loans (100.0%). All fixed-rate loans roll off onto either Paragon's SVR-0.75% rate (69.0%) or onto SVR (31.0%) within two to five years after origination.

The fixed-floating risk between the fixed-rate loans and the SONIA due under the notes is hedged via a fixed notional interest rate swap with Lloyds Bank Corporate Markets Plc (A1/P-1; A1(cr)/P-1(cr)). Under the swap agreement:

» The issuer will pay a swap rate;

» The swap counterparty will pay SONIA on the same notional balance.

The swap has a fixed notional that amortises over time based on an assumption of 0.0% Constant Prepayment Rate ("CPR"). If the notional of the fixed-rate loans in the pool differs from that of the swap, the issuer will be overhedged. We have tested different amortisation profiles of the portfolio to analyse the potential impact of overhedging in case of CPR above 0%.

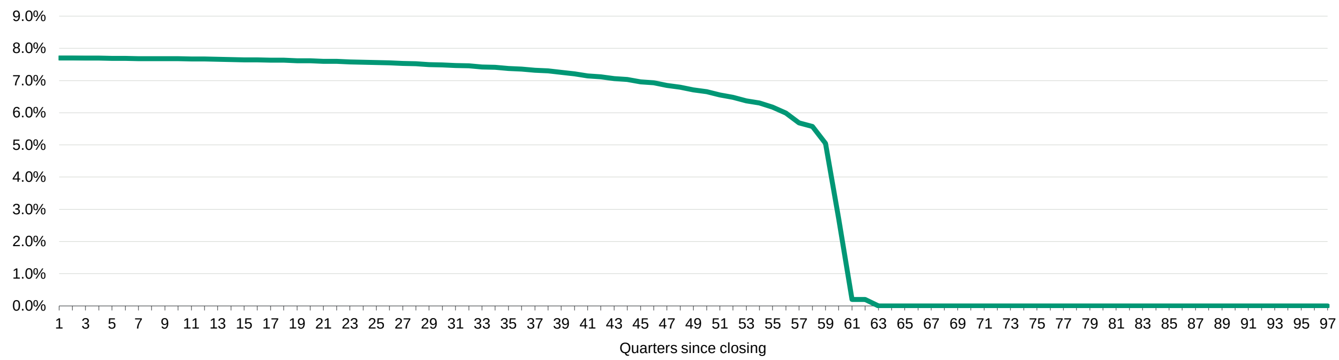
Upon a product switch, the issuer will, within 30 days, enter into an additional swap agreement to hedge the fixed-floating interest rate exposure in relation to such converted mortgage only if and when the notes become under- or overhedged by more than £10 million. We have accounted for a potential underhedged exposure through a reduction in the yield by assuming £10 million of the pool will remain unhedged in a stressed scenario where SONIA increases over time.

The transaction is unhedged with respect to SVR-linked mortgages as Paragon's SVR is not explicitly tied to SONIA. As in previous Paragon transactions, the transaction benefits from an obligation for Paragon to maintain a minimum spread over the index rate paid on the notes. Under this obligation, the servicer will have to set the rate on the variable-rate mortgages in the pool so as to ensure a minimum WA spread of 3.0% over SONIA (after taking into account swap payments, any funds standing to the credit of the Mortgage Margin Reserve Fund and the scheduled release from the Conversion Margin Reserve Fund) is maintained at all times. The Mortgage Margin Reserve Fund will not be funded at closing. However, on each principal determination date, the servicer will calculate the Additional MRF Requirement Amount (if any) and may (at its discretion) fund these amounts through the Revenue Priority of Payments and with any amounts available from the Discretionary Mortgage Margin Reserve Fund.

Given the proportion of SVR loans post-reversion in the pool will be 100%, we believe that Paragon will have the ability to comply with this minimum spread mechanism and have given partial benefit to the servicer's commitment.

Exhibit 8 shows the yield vector used by us in the analysis of the transaction after taking into account Paragon's minimum spread commitment, which has been stressed to account for the potential for the notes to be underhedged because of the £10 million hedging corridor.

Exhibit 8
Scheduled yield vector used by Moody's assuming a 5.7% SONIA rate



Source: Moody's Investors Service

Comparables

Exhibit 9

Benchmark table with other transactions by the same originator and comparable transactions

Deal Name	Paragon Mortgages (no. 28) plc	Paragon Mortgages (no. 27) plc	Paragon Mortgages (No. 26) PLC	Paragon Mortgages (No.25) PLC	Paragon Mortgages (No.24) PLC	Twin Bridges 2019-1 PLC	Twin Bridges 2019-2 PLC	Precise Mortgage Funding 2019-1B Plc
Closing date	11-Nov-20	30-Apr-20	3-Jul-19	26-Apr-18	19-Nov-15	17-May-19	8-Oct-19	31-May-19
Cut-off date	30-Oct-20	21-Apr-20	22-Jun-19	17-Apr-18	11-Nov-15	28-Feb-19	31-Aug-19	30-Apr-19
Information from	Closing Pool	Closing Pool	Closing Pool	Closing Pool	Closing Pool	Closing Pool	Closing Pool	Closing Pool
Originator(s)	Paragon	Paragon	Paragon	Paragon	Paragon	FHL Paratus/ Keystone	Paratus/ Keystone	CCFS
Servicer(s)	Paragon	Paragon	Paragon	Paragon	Paragon	Paratus AMC	Paratus AMC	CML
MILAN CE	11.5%	11.5%	11.5%	14.5%	12.0%	14.0%	13.0%	12.0%
Expected loss	1.25%	1.25%	1.25%	1.25%	1.25%	2.50%	2.20%	2.00%
Portfolio stratification								
Avg. current LTV	71.5%	73.3%	70.6%	70.3%	72.5%	70.2%	70.3%	72.6%
Avg. current LTV indexed	70.6%	73.3%	67.3%	64.6%	72.4%	70.5%	69.8%	72.5%
% current LTV >= 70%	74.8%	80.6%	67.9%	66.9%	77.7%	61.6%	63.3%	72.3%
% current LTV >= 80%	9.9%	21.2%	5.3%	4.5%	12.3%	4.5%	4.0%	16.8%
% current LTV >= 90%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Self employed	69.0%	68.8%	52.3%	57.9%	41.9%	67.7%	38.5%	51.1%
% Self certified	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Fast track	0.0%	0.0%	0.0%	0.0%	0.0%	N/A	N/A	0.0%
% Non-Owner occupied (Includes: partial owner, vacation or second homes)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% Fixed interest	100.0%	100.0%	85.6%	81.5%	89.2%	100.0%	99.9%	81.4%
% IO without collateral	93.7%	94.8%	92.4%	92.1%	93.3%	96.8%	95.1%	91.0%
Total arrears	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
% CCJs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% IVA / Bankruptcy	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Max regional concentration	South East (35.0%)	South East (34.0%)	South East (41.0%)	South East (35.8%)	South East (40.1%)	South East (40.0%)	South East (40.6%)	South East (32.5%)
Max vintage concentration	2020 (97.7%)	2019 (80.5%)	2017 (58.4%)	2017 (31.7%)	2015 (94.2%)	2018 (75.5%)	2019 (99.7%)	2018 (70.1%)
Portfolio data								
Current balance	£720,119,714	£759,666,134	£618,144,309	£705,272,722	£348,458,860	£329,245,833	£232,707,597	£733,654,956
Avg. loan per borrower	£270,416	£270,536	£197,932	£206,522	£186,641	£304,857	£284,831	£205,390
Borrower top 20 (as % of pool bal)	7.3%	6.3%	5.8%	4.6%	5.8%	10.2%	11.3%	3.9%
WA interest rate	3.5%	3.6%	3.8%	3.8%	3.8%	3.6%	3.5%	3.6%
WA seasoning in years	0.5	0.6	2.9	2.4	0.4	0.3	0.2	1.2
WA time to reset in years	3.6	3.6	1.9	2.4	1.8	4.3	4.4	3.1
WA time to maturity in years	21.3	21.2	18.3	18.7	21.0	21.4	22.0	22.3
Maximum maturity date (dd/mm/yyyy)	29/10/2045	31/01/2045	17/04/2043	11/30/2042	10/16/2040	24/02/2049	29/08/2049	19/10/2053
Avg. House Price stress rate	36.8%	35.0%	37.6%	33.6%	33.4%	39.9%	38.0%	37.1%
Avg. House Price change since origination	1.5%	0.0%	5.8%	9.8%	0.2%	-0.4%	0.7%	0.1%

Source: Moody's Investors Service

Sector outlook

We have a negative collateral performance outlook for the UK BTL RMBS sector. However, the UK's low interest rates should continue to support RMBS performance.

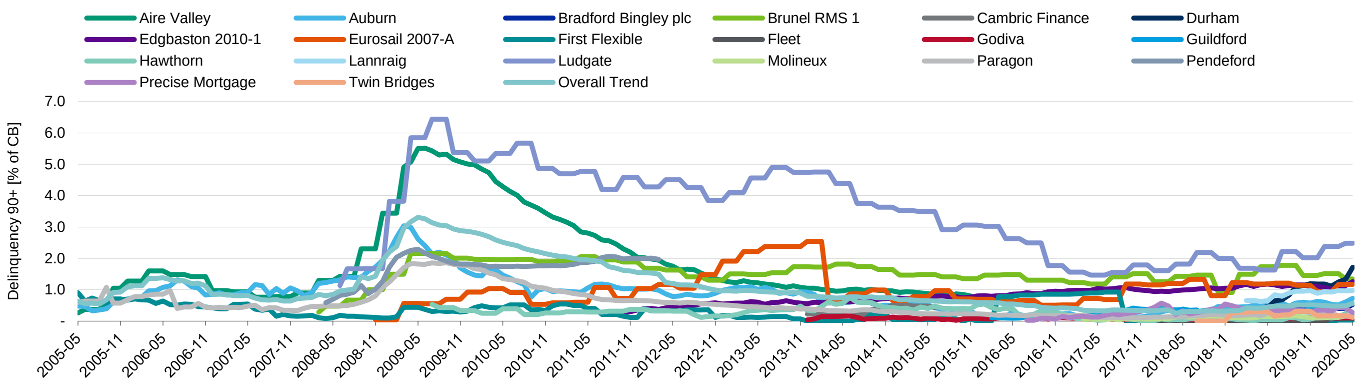
The drivers of the expected UK BTL collateral performance are (1) rental income, which will grow more slowly or even decline in some regions, and (2) the pressure on tenants' disposable income. BTL transactions with large exposures to recent vintage mortgages will be the most affected by these risk drivers.

In addition to this transaction, the Paragon Banking Group has sponsored other UK BTL RMBS transactions rated by us. The performance of the transactions has been in line with our expectations and better than sector average.

Please see Exhibits 10-13 to understand how comparable deals in the sector have performed.

Exhibit 10

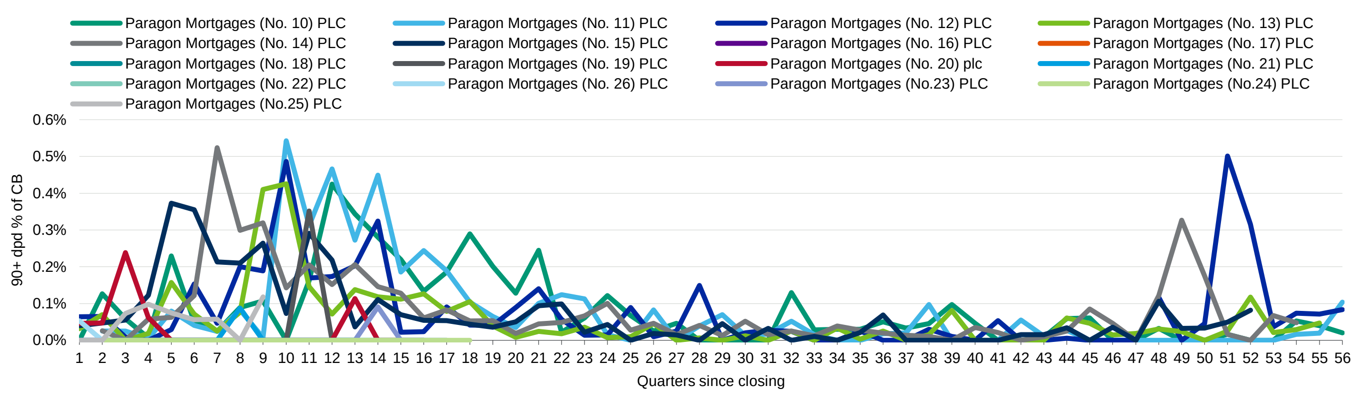
BTL RMBS - UK 90+ days delinquency Percentage of current portfolio balance



Sources: Moody's Investors Service, periodic investor/servicer reports

Exhibit 11

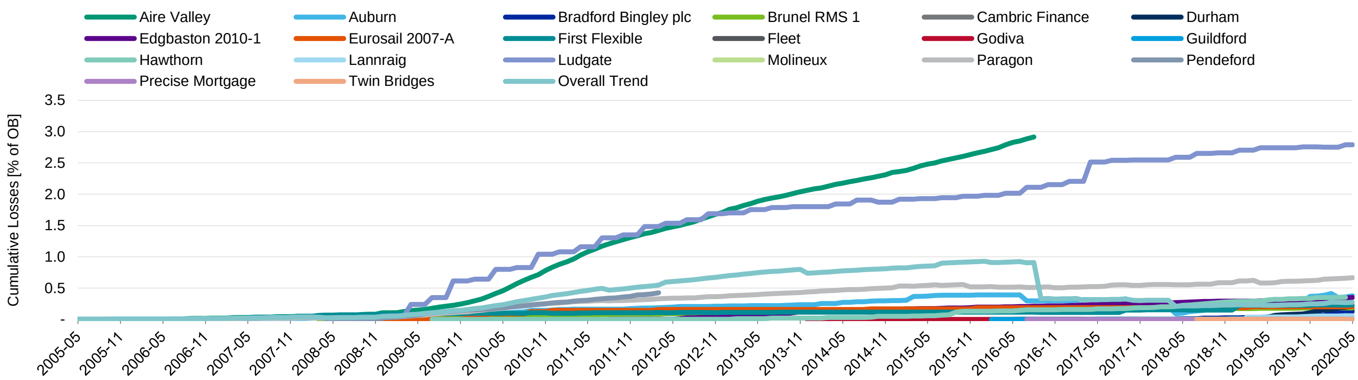
Paragon Mortgages deals - UK 90+ days delinquencyPercentage of current portfolio balance



Sources: Paragon Banking Group

Exhibit 12

BTL RMBS - UK cumulative losses

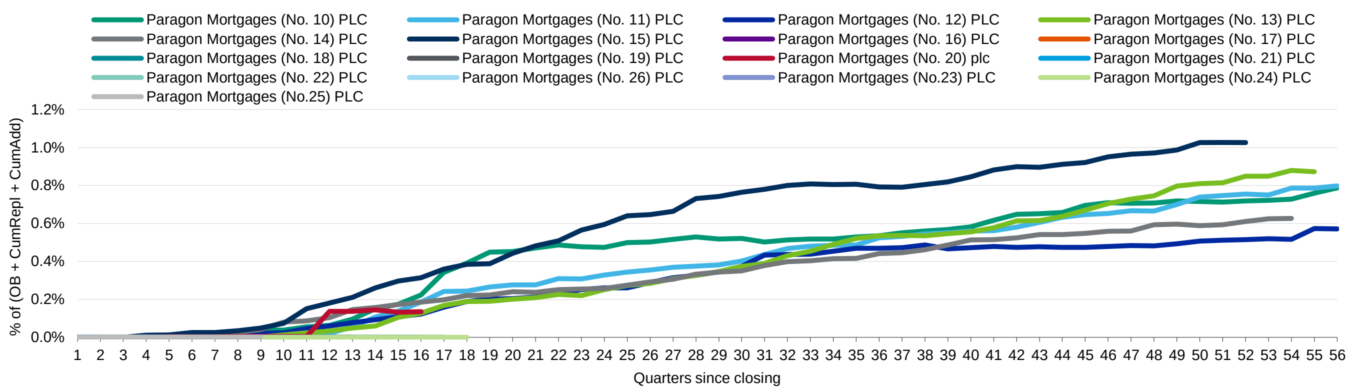


Numerator: Cumulative losses since closing date. Denominator: Original pool balance plus cumulative replenishments for stand alone deals, and current pool balance plus cumulative additions for master trusts.

Sources: Moody's Investors Service, periodic investor/servicer reports

Exhibit 13

Paragon RMBS - UK cumulative losses



Numerator: Cumulative losses since closing date. Denominator: Original pool balance plus cumulative replenishments for stand alone deals, and current pool balance plus cumulative additions for master trusts.

Sources: Paragon Banking Group

Additional asset analysis

Data quantity and content

In our view, the quantity and quality of data received is similar compared with those in transactions that have achieved high-investment-grade ratings in this sector. An AUP has been performed by Deloitte LLP. The AUP results were in line with our expectations and did not highlight any particular concerns regarding the quality of the data.

Origination quality

We believe that Paragon Banking Group has adequate controls and procedures in place to generate high-quality loans, and according to our originator review, the overall origination ability and stability of Paragon has been classified as average. For more information, see Appendix 3, which contains the originator review.

Servicing quality

We have reviewed Paragon's procedures and practices, and found Paragon acceptable in the role of servicer. According to our servicer review, the overall servicing ability and stability has been classified as average. For more information, see Appendix 3, which contains the servicer review.

Receiver of rent

The sellers/administrators use a receiver of rent as a means of controlling arrears and losses for third-party loans that they service and it could be used for the loans in this transaction.

Because of the low level of arrears in the favourable interest rate environment, this has yielded positive results to date, with precise performance metrics comparing favourably with the sector average.

We believe that should the house prices weaken significantly, it could lead to an increase in loss severities. In a severe recession, a receiver of rent may be unable to successfully re-let a vacant property and so repossession would occur in any case but with a lag and an increased loss severity. Additionally, excess spread can leak out of the transaction instead of covering losses and amortising the notes down, as in the case of repossession. Finally, this is an operationally more complex method of resolving payment problems compared with attempting to foreclose sooner, which could be compounded in case the servicer itself is under financial pressure.

Set-off

Some of the borrowers have an account with Paragon Bank Plc (PB); however, only a few have an account balance above £85,000, which is the limit above which the UK deposit scheme does not reimburse the account holder in case the deposits are lost because of, for example, insolvency of Paragon Bank. Loans to Paragon Bank Plc borrowers who have deposits in excess of £85,000 may not be added to the portfolio on the Closing Date.

Deposit set-off risk has, therefore, not been modelled in this transaction.

ESG-Environmental considerations

Environmental risks to RMBS can arise from natural disasters, such as flooding, earthquakes, hurricanes, or wildfires, which can disrupt borrowers' lives and increase delinquencies or defaults, and can damage or destroy properties backing loans in the transaction or surrounding infrastructure, lowering collateral value. Pool diversification mitigates the impact of many environmental risks on deals, but regional concentrations can occur. Insurance is also a mitigant to many types of property damage. However, insurance often will not fully cover the cost of the resulting damage. Furthermore, some risks are typically not covered by insurance on individual loans. These include damage from earthquakes and flooding outside specified areas that require mandatory flood insurance, as well as loss of value from damage to critical infrastructure.

ESG-Social considerations

Our analysis has considered the effects that the coronavirus outbreak and the announced government measures to contain the virus are having and will have on the UK economy and on the performance of mortgage loans. Specifically, for UK RMBS, loan performance will weaken due to an increase in the unemployment rate, which may limit borrowers' income and their ability to service debt. The softening of the housing market will reduce recoveries on defaulted loans, also a credit negative. Furthermore, borrower assistance programs, such as Payment holidays, may adversely impact scheduled cash flows to bondholders.

Securitisation structure description

The originators and sellers, Paragon Mortgages 2010 Limited (PML) and Paragon Bank Plc (PB), sold portfolios of residential BTL mortgage loans to the issuer, Paragon Mortgages (No.28) PLC.

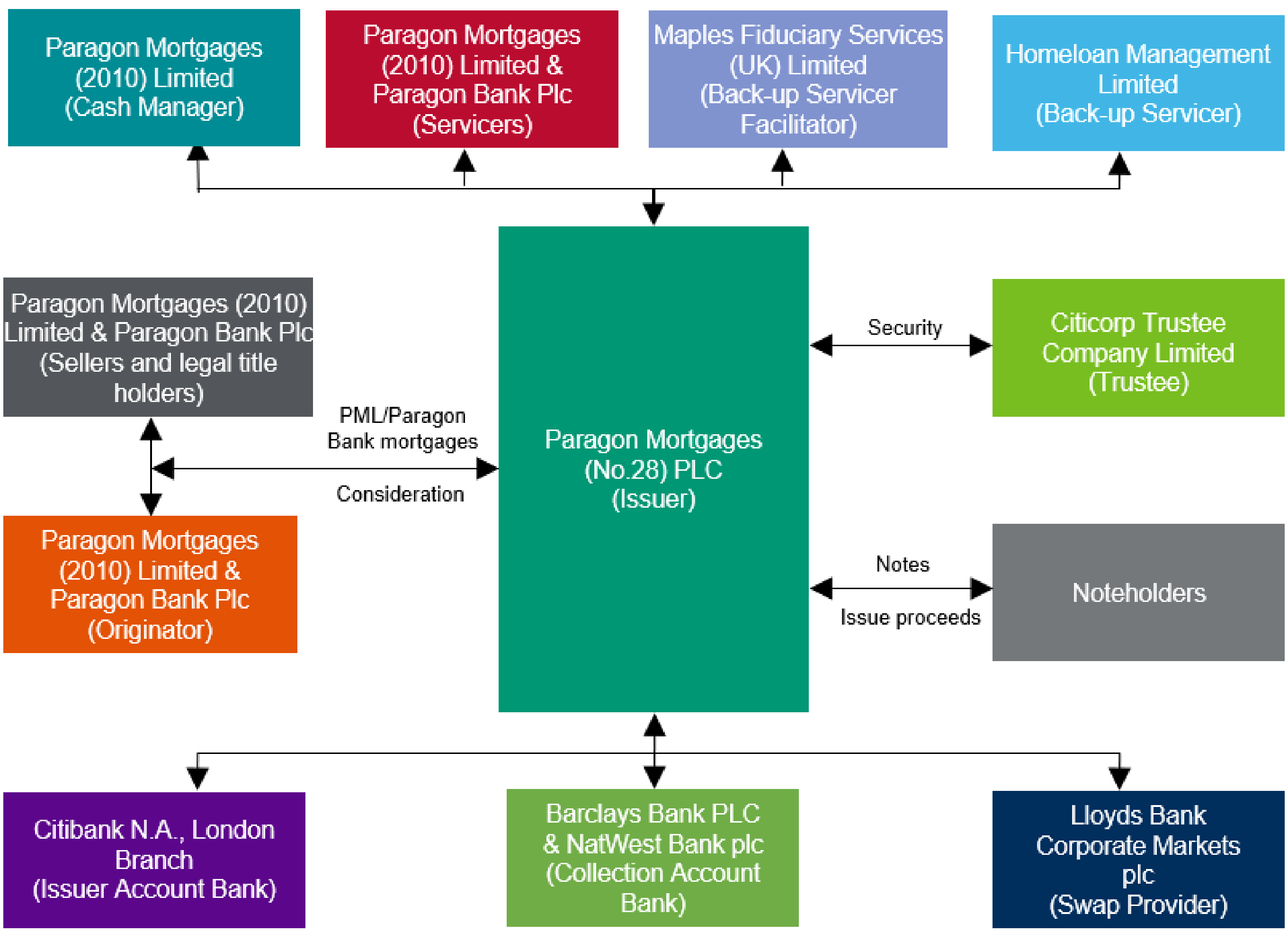
At closing, the issuer issued the notes and certificates to finance the purchase of the asset pool. Each seller will service the assets it sold to the issuer, although PML will take the lead in servicing with respect to any dealings with the issuer.

Issuing the residual certificates to the Sellers entitles them to receive deferred consideration on the loans sold to the issuer. Exhibit 14 illustrates all the parties and their respective roles.

Structural diagram

Exhibit 14

Paragon Mortgages 28 PLC transaction structure



Source: Paragon Mortgages (No.28) PLC

Detailed description of the structure

Credit enhancement

The Class A notes benefit from the subordination provided by more junior notes, namely Class B-Z notes.

At closing, the aggregate reserve funds has been sized to 1.5% of the initial principal balance of the rated notes. An amount corresponding to 1.5% of the Class A and Class B notes outstanding will form the Class A and Class B Liquidity Reserve Fund, which will cover interest shortfalls on Class A and Class B notes and senior expenses. A further 1.5% of the Class C and D notes will form the General Reserve Fund, which is available to cover senior expenses as well as A, B, C and D note shortfalls. Both reserve funds amortise, and amounts not needed after amortisation will be added to the issuer's available revenue funds, which can cover all items of the revenue waterfall, including the PDL for all notes. The transaction has annualised excess spread at closing of around 1.7% (after swap payments).

The reserve funds will not amortise in certain circumstances, for example, if they are funded below their target level at the previous interest payment date, when the cumulative amounts debited to the PDL exceed 1.0% of Classes A-Z or the balance of loans more than three months in arrears exceeds 3.0%.

Flow of funds

Allocation of payments/pre-accelerated revenue waterfall: On each quarterly payment date, the issuer's available funds (that is, interest amounts received from the portfolio, the reserve funds, funds received under the swap agreement, interest earned on the issuer's account and eligible investments, principal addition amounts and amounts released from the conversion, and margin reserves) will be applied in the following simplified order of priority and only to the extent that the payments of higher priority have been made in full:

1. Senior fees and expenses to various parties;
2. Payments to the swap providers (other than subordinated amounts);
3. Interest on the Class A notes;
4. Eliminating any debit balance on the PDL that exceeds the aggregate current principal outstanding of the Class B notes, the Class C notes, the Class D notes and the Class Z notes;
5. Interest on the Class B notes;
6. Amounts required to replenish the Class A and Class B Liquidity Reserve Fund up to its target size;
7. Eliminating any debit balance on the PDL that exceeds the aggregate current principal outstanding of the Class C notes, the Class D notes and the Class Z notes;
8. Interest on the Class C notes;
9. Eliminating any debit balance on the PDL that exceeds the aggregate current principal outstanding of the Class D notes and the Class Z notes;
10. Interest on the Class D notes;
11. Eliminating any debit balance on the PDL that exceeds the current principal outstanding of the Class Z notes;
12. Issuer profit amount (£250 a quarter);
13. Amounts required to replenish the General Reserve Fund up to its target size;
14. Eliminating any remaining debit balance on the PDL;
15. On any interest payment date occurring before the step-up date, towards funding the mortgage margin reserve fund and the conversion margin reserve fund in connection with interest rate converted mortgages expected during the next collection period or any increase to the mortgage margin reserve fund (if any) or establishing the discretionary payment holiday reserve fund (if any) ;
16. Other costs, payments or fees because of third parties;
17. Hedge subordinated amounts;

18. On any interest payment date occurring on or after the step-up date or the final redemption date, to apply all amounts as available principal receipts;
19. Interest due on the Class Z notes;
20. Interest due on the Class S notes;
21. Principal due on the S notes (subject to the principal payment not reducing the balance of the S note below the required level of the respective reserve fund);
22. First interest and then principal due on the S VFN;
23. Purchase of additional hedging arrangements;
24. Junior fees and expenses;
25. On any interest payment date before (but excluding) the step-up date, all excess amounts to be paid to the RC1 certificate holders and thereafter, to the RC2 certificate holders.

Interest on Classes B, C, D and Z notes is deferrable as long as they are not, at that point in time, the most senior outstanding class of notes. Interest is not deferrable on Class A or the most senior class of notes.

Allocation of payments/pre-accelerated principal waterfall*:* On each quarterly payment date, the available principal receipts, which include principal amounts received from the portfolio, amounts applied to clear the PDL, but which are reduced by principal addition amounts (principal receipts to pay Class A and in certain circumstances Class B interest), will be applied in the following order of priority and only to the extent that the payments of higher priority have been made in full:

1. Towards mandatory further advances to the extent that the issuer has insufficient reserves to cover such amounts;
2. Towards discretionary further advances;
3. Refunding incorrect direct debit payments taken (if any);
4. To amortise the notes sequentially in order of seniority;
5. All remaining amounts to be applied as available revenue receipts.

Allocation of payments/PDL-like mechanism

A PDL is recorded for realised losses on the portfolio and when there has been application of principal receipts to meet any items in the interest waterfall.

Realised losses are defined as any losses arising in relation to a loan in the portfolio, which cause a shortfall in the amount available to pay principal on the notes, but may be reduced if subsequent recoveries are received by the issuer on those loans. Losses arising because of borrowers applying set-off have not been included in the definition of realised loss.

Reserve fund

At closing, the Class A and B Liquidity Reserve Fund has been funded with the proceeds of the Class S notes for an amount corresponding to 1.5% of the aggregate Class A and B notes issuance size. The General Reserve Fund has been funded via the same means at 1.5% of the sum of the Class C and D notes issuance sizes.

The reserve funds amortise to maintain 1.5% of the respective principal outstanding of the relevant notes. The reserve funds stop amortising if the balance of mortgages more than three months in arrears exceeds 3.0% of the securitised mortgage pool or if the cumulative amount debited to the PDL since closing exceeds 1.0% of the initial notes balance (A to Z).

Liquidity

Liquidity is provided as follows: in the event of a shortfall in available revenue funds to pay senior expenses, Class A and Class B interest, the Class A and B Liquidity Reserve Fund is used.

If the issuer still has a shortfall in revenue receipts to pay rated note interest or senior expenses, or both, then the General Reserve Fund may be used.

Finally, principal is available to pay senior expenses, Class A and Class B note interest once the above two reserves have been exhausted (subject to no more than 50% Class B PDL when it comes to Class B interest being paid). Such diversions of principal result in a debit to the PDL.

Asset transfer

The residential mortgage loans in the pool have been transferred to the issuer through an equitable assignment. Notification of redirection of payments to the issuer's account occurs upon perfection of legal title, which would take place, for example, in case of insolvency of the seller/servicer or an enforcement notice being served on the issuer.

Cash manager

The cash manager in the transaction is PML. Its main responsibilities are the determination of cash flow amounts, maintenance of ledgers and preparation of investor report. The main responsibilities of the backup servicer facilitator, Maples Fiduciary Services (UK) Limited, are to use its best efforts to appoint a backup servicer in case PML or PB cannot perform their servicing duties any longer.

Enforcement of representations and warranties (R&W)

Loan repurchase following breach of R&W: if material breaches of R&W have not been remedied within 28 days of the issuer notifying such breaches, the relevant seller shall repurchase the loan from the issuer.

Securitisation structure analysis

Our ratings are based on the quality of the asset pool, the levels of credit enhancement, the liquidity provided by the reserve funds, and the structural and legal integrity of the transaction. The ratings on the notes address the likelihood of receipt by noteholders of timely payment of interest and ultimate payment of principal at par on or before the rated final legal maturity date for all rated notes. Our ratings address only the credit risks associated with the transaction.

Primary structural analysis

We consider the probability of default under the notes, as well as the estimated severity of loss, when assigning a rating.

Tranching of the notes

Once the loss distribution of the pool under consideration has been computed, a cash flow model is used to assess the impact of the structural features of the transaction. It calculates the average lives and the losses experienced by the notes for every loss scenario for the portfolio. Based on these numbers, the expected loss and the WA life of the notes are calculated as WAs based on the probabilities of the respective scenarios. The expected loss on each tranche, together with the notes' WA life, determines the rating, which is consistent with our target losses for each rating category.

Spread compression

In our cash flow modelling, we took into account the decline in the average spread on the pool over time, described under "Asset analysis - Primary asset analysis – Risk of yield compression" above.

The transaction benefits from a fixed-floating swap provided by Lloyds Bank Corporate Markets plc (A1/P-1; A1(cr)/P-1(cr)), whose notional covers the fixed portion of the pool until the fixed-rate loans switch to their reversionary floating rate or SVR. Under the swap agreement, the issuer will pay a swap rate and will receive SONIA as is owed to the notes. Upon a product switch, the issuer will, within 30 days, enter into an additional swap agreement to hedge the fixed-floating interest rate exposure in relation to such converted mortgages only if and when the notes become under hedged by more than £10 million.

The collateral trigger for the fixed-rate swap has been set at loss of A3(cr) and the replacement trigger at loss of Baa1(cr). The transfer trigger level is lower than that of a typical UK standalone RMBS transaction; however, given the current rating of the swap counterparty, the level of the trigger does not have a negative impact on the ratings of the notes.

The swap documents are substantially consistent with our methodology to assess counterparty exposure (see Moody's Approach to Assessing Counterparty Risks in Structured Finance, published in June 2020).

Subordinated swap amounts: Should the swap be terminated with the swap counterparty as either the sole affected party or the defaulting party, the swap termination payment is subordinated in the waterfall. However, the payment ranks ahead of clearing the Class Z PDL. Therefore, should such a swap termination payment be due at the same time that there are losses in the loan portfolio, excess spread would go to the swap counterparty first as opposed to benefiting the noteholders by provisioning for such losses through the PDL.

Comparables

Exhibit 15 shows the main structural features of the current transaction compared with those of the peers that our Rating Committee made the main benchmarking against.

Exhibit 15
Benchmark table for structural features

Deal Name	Paragon Mortgages (no. 28) plc	Paragon Mortgages (no. 27) plc	Paragon Mortgages (No. 26) PLC	Paragon Mortgages (No.25) PLC	Paragon Mortgages (No.24) PLC	Twin Bridges 2019-1 PLC	Twin Bridges 2019-2 PLC	Precise Mortgage Funding 2019-1B Plc
Structural features								
Notes payment frequency	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Replenishment periods	0	0	0	20	0	0	0	None
Rating and CE for senior note	Aaa(sf); 14.96% CE	Aaa(sf); 16.20% CE	Aaa(sf); 14.95% CE	Aaa(sf) with 15.01% CE	Aaa(sf) with 15.26% CE	Aaa (sf) with 19.50% CE	Aaa/19.0%	Aaa (sf) with 14.50% CE
Reserve Fund (Closing)	1.50%	1.50%	1.50%	1.50%	2.50%	2.00%	1.5% (LRF), 2.0% (GRF)	1.50%
Reserve Fund Fully Funded at Closing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	YES
Reserve Fund floor	0.00%	0.00%	0.00%	0.00%	N/A	non-amortizing	0.00%	1.50%
Hedge in place	Fixed-Floating Swap	Fixed-Floating Swap	Fixed-Floating Swap	Fixed/floating swap	Fixed-floating and cross-currency swaps	Fixed-Floating Swap	Fixed-Floating Swap	Fixed-Floating Swap
Swap rate or guaranteed XS (if applicable)	0.40%	0.46%	0.73%	Variable average swap rate, no guaranteed XSS	N/A	N/A	1.00%	0.92%
Principal to pay interest?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Moody's Investors Service, Paragon Mortgages (No.28) PLC

Additional structural analysis

Cash commingling

All the payments under the loans in this pool are paid into a collection account in the name of each seller, either at NatWest Bank (A1/P-1 deposits ratings; Aa3(cr)/P-1(cr)) or Barclays Bank PLC (A1/P-1; A1(cr)/P-1(cr)). The following mitigants to commingling risk and collection account bank default risk are included in the structure:

» *Daily transfer of payments to the issuer account held by* Citibank, N.A., London Branch (Aa3/(P)P-1; Aa3(cr)/P-1(cr));

» *Collection account declaration of trust:* The seller has declared a trust (among the issuer, the seller and the collection account banks) over the collection accounts in favour of the issuer;

» *Transfer trigger for the collection account:* Should either of the collection account banks be downgraded below Baa3, they need to be replaced.

Given the aforementioned mitigants, commingling risk has not been modelled.

Mitigating servicing disruptions

Homeloan Management Limited has been appointed as back-up servicer and cash manager, via the back-up administration agreement. It has agreed to a relatively tight window of five days in which it will step in to assume either or both of the duties in case the Administrators are unable to perform such duties.

Furthermore, Maples Fiduciary Services (UK) Limited has been appointed as back-up servicer facilitator, a positive feature. In case HML and the sellers/administrators are unable to perform their duties, it will use its best efforts to appoint a replacement servicer.

In the event the servicer report is not delivered in time, the servicer shall base the payments on estimates using the last three verified servicing reports, and once it receives the servicer report, it will reconcile the estimates with the actual figures and if needed make additional payments.

Also, the swap payment can be based on estimates in absence of the servicer report. It should be noted that revenue receipts can leak out of the transaction during a servicer interruption. However, any reconciling amounts arising because of a swap counterparty following estimation as a result of operational disruption will only be paid to the extent cash is available and such a shortfall will not cause a termination of the swap.

Liquidity of around 13.9 months of interest payments and senior expenses on the rated notes is provided by the two reserve funds assuming current SONIA and current hedging in place, including the swap costs.

Mortgage Payment Holidays

On March 16th, 2020 the Chancellor of the Exchequer announced that lenders should grant customers who needed it a 3 months Mortgage Payment Holiday to ease economic pressure due to the coronavirus outbreak. This guidance was updated on 4 June 2020 and on 16 June 2020 and again on 2 November 2020. Mortgage Payment Holidays are available to the Buy-to-Let customers of Paragon Mortgages (No. 28) PLC pool, up until 31 January 2021. In accordance with the guidance provided by the FCA Paragon can grant up to 6 months of Mortgage Payment Holiday to customers who have requested them. Payment holidays still need to be repaid and whilst the payment holidays do not impact borrower's credit rating, it is expected that the benefit will be passed onto their tenants. As of August 2020, granted Mortgage Payment Holidays accounted for 2.0% of the Closing Pool outstanding balance. For the closing pool, this accounted for 0.66% of the closing pool.

The transaction benefits from a Discretionary Payment Holiday Reserve Fund which would be credited pursuant to the Revenue Priority of Payment at the discretion of the administrator and used to provide for losses or expenses arising from the Issuer's business.

In order to take into account this risk, we have stressed the Mortgage Payment Holidays of the portfolio to high level in order to assess that the rated notes would not suffer any coupon payment disruption.

ESG-Governance considerations

Strong RMBS governance relates to transaction features that promote the integrity of the operations of transaction for the benefit of investors, as well as the data provided to investors. The following are some of the governance considerations related to the transaction:

» **Risk retention:** This transaction is subject to the European risk retention requirements, which require the sponsor to hold at least 5% of the credit risk.

» **Agreed upon procedures (AUPs):** An independent due diligence firm reviewed a sample of the portfolio and provided an agreed upon procedures (AUP) report for data integrity matters. This increases our confidence that the data that we and investors relied on is accurate.

» **Servicing oversight:** The servicer (NR) is a fully regulated bank under the supervision of the national bank regulator and has to adhere to certain standards in terms of independent control and audit functions as well as internal credit policies and servicing procedures in relation to the granting of Mortgage loans.

» **Bankruptcy remoteness:** We expect to receive legal opinions to the effect that in the event of a bankruptcy or insolvency proceeding with respect to key transaction parties, the securitized mortgage loans would not be treated as part of the estate of such party. Also the SPV is a special purpose entity and is independently owned and managed. SPV directors are not incentivized by applicable bankruptcy law to file for bankruptcy.

Methodology and monitoring

Overview

The principal methodology used in this rating was Moody's Approach to Rating RMBS Using the MILAN Framework, published in May 2020.

We will monitor the transaction on an ongoing basis to ensure that it continues to perform in the manner expected, including checking all supporting ratings and reviewing periodic servicing reports. Any subsequent changes in the rating will be publicly announced and disseminated through Moody's Client Service Desk.

Significant influences: In addition to the counterparty issues noted, further deterioration in the housing market beyond that modelled may have an impact on the subject transaction's ratings.

Factors that could lead to an upgrade

- Better performance of the underlying collateral than initially expected;
- Deleveraging of the capital structure.

Factors that could lead to a downgrade

- Material reduction in creditworthiness of the seller/servicer or of the other transaction counterparties;
- Significant deterioration in the UK economy and real estate market;
- Unforeseen legal or regulatory changes.

Monitoring triggers

Interest rate swap triggers:[1]

- Remedy for loss of A3(cr) is to post collateral;
- Remedy for loss of Baa1(cr) is to replace the swap counterparty or obtain a guarantee from a guarantor.

For issuer account bank triggers:[2]

- Loss of A3 (senior unsecured rating), remedy is to replace or find a guarantor;
- Eligible investments must be rated at least A2 and P-1 or A3 (up to one month investments).

For collection account bank triggers:

- Loss of Baa3 (senior unsecured rating), remedy is to replace or find a guarantor.

Monitoring report

Data quality

- The investor report format is being finalised;
- The report will be in line with previous Paragon deals and so in line with other transactions in the sector;
- There is an undertaking to provide us with an updated pool cut once a quarter;
- Loan modifications for arrears management are not reported separately;
- Further advances are reported in the investor reports.

Data availability

- The report is provided by Paragon Mortgages (2010) Limited;
- The timeline for the investor report is provided in the transaction documentation and the priority of payment section is published on the interest payment date;
- The investor report is likely to be completed no later than 30 days following the end of the relevant collection period;
- The frequency of the publication of the investor report is quarterly and the frequency of the interest payment date is quarterly;
- Investor reports are publicly available on a website.

The analysis that we undertook at the initial assignment of a rating for an RMBS may focus on aspects that become less relevant or typically remain unchanged during the surveillance stage. Please see Moody's Approach to Rating RMBS Using the MILAN Framework for further information on our analysis at the time of the initial rating assignment and the ongoing surveillance in RMBS.

Modelling assumptions

Sensitivity to variation in some of the modelling assumptions may have been considered in the analysis.

Exhibit 16

Expected loss:	1.3%
MILAN credit enhancement:	11.5%
Covariance (Cov):	76.3%
Timing of Defaults/Losses:	Sine (3-11-21 quarters)
Recovery rate:	N/A
Recovery lag:	N/A
Conditional Prepayment Rate (CPR):	15.0%
Fees (as modelled):	0.3%, with a floor of £50,000
PDL definition:	Losses
Amortization Profile:	Scheduled amortisation of the assets
Country ceiling:	Aaa
Margin compression:	Stressed SONIA over underhedged portfolio
Basis Risk Adjustment - Lender Variable Rate:	N/A
Basis Risk Adjustment - Other Basis Mismatch:	N/A
Interest on cash:	None
Commingling risk modelled?	No
Excess spread (model output)*:	1.7%

* Annualized excess spread in a zero default scenario based upon the first payment period value using Moody's stressed asset yield and fees assumptions.
Source: Moody's Investors Service

Moody's related publications

For a more detailed explanation of our approach to this type of transaction, as well as similar transactions, please refer to the following reports:

Methodologies Used:

» Moody's Approach to Rating RMBS Using the MILAN Framework, May 2020

» Moody's Approach to Assessing Counterparty Risks in Structured Finance, June 2020

New Issue Reports:

» Paragon Mortgages (No. 27) PLC- New Issuer Report, April 2020 (1220120)

» Twin Bridges 2019-2 PLC - New Issuer Report, October 2019 (1197551)

» Paragon Mortgages (No. 26) PLC - New Issue Report, July 2019 (1183257)

» Precise Mortgage Funding 2019-1B Plc - New Issuer Report, May 2019 (1178298)

» Twin Bridges 2019-1 PLC - New Issuer Report, May 2019 (1175683)

» Paragon Mortgages (No.25) PLC - New Issue Report, April 2018 (1121715)

» Paragon Mortgages (No. 24) PLC - New Issue Report, November 2015 (SF421266)

Related Research:

» "Brexit bounce" will support UK RMBS through first-half 2020, before longer-termhousing market uncertainty returns, February 2020 (1216196)

» Buy-to-let RMBS - UK: Performance Update - Excel, January 2020 (1210805)

» Higher portfolio landlord concentration is credit negative for buy-to-let deals, November 2019

» Housing affordability is decreasing in major cities, amid high credit quality of mortgages, May 2019 (1162702)

» Libor transition continues to create risks for new transactions, May 2019 (1161698)

» UK ban on Section 21 evictions would be credit negative for buy-to-let securitisations, April 2019 (1171646)

» First third party hedged UK RMBS with SONIA-linked notes supports the growth of SONIA-linked swaps, a credit positive, March 2019 (1165363)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Appendix 1: Summary of the originator's underwriting policies and procedures

Exhibit 17

Originator Ability	At closing
Sales and marketing practices	
Origination channels:	95% brokers, 5% direct customer enquiries
Role of the intermediaries/brokers:	The intermediary acts as the applicants adviser and submits application information only. Validation is carried out by Paragon.
Frequency of intermediaries/brokers monitoring:	Brokers are subject to initial due diligence and monitoring of performance is ongoing.
Compensation/ incentive structure of sales team (brokers/intermediaries and branches):	Intermediaries are paid a procuration fee for introducing an application typically between 0.5% and 0.75% of the loan on completion. Paragon regional managers are compensated with a mix of basic salary and bonus. The bonus will typically equate to 20 - 25% of basic salary.
Separation and independence of sales and approval function:	Sales and underwriting operate independently and report through separate directors. Sales have no underwriting mandate.
Underwriting policies and procedures	
% of loans automatically underwritten (i.e. without manual approval):	0% - All loans are written based upon manual approval. The system based underwriting system is designed to filter applications and assist the underwriter, not replace them.
% of loans manually underwritten:	100%
Back-testing of automatic underwriting/internal score (if applicable):	Both manual and credit score assisted processes are reviewed on an ongoing basis and credit reports produced monthly to the Group Credit Committee.
Average experience in underwriting or tenure with company:	44% 0-5 years , 12% 5-10 and 44% with 10+ years' experience
Ratio of loans underwritten per FTE1 per day:	Within a range 2 - 4 (depending on complexity)/day
Criteria for compensation of underwriters:	Underwriters are compensated on basic salary only (no performance related bonus) and also participate in a Group wider profit related pay scheme which pays an annual sum based on a distribution of 1% of the Group's gross profit. The average over the last 5 years per employee was £1.4k
Approval rate:	The approval rate is circa 55%
Mandate/lending authority for first level underwriter/personnel:	£100k 75%LTV - is the lowest level mandate authority.
Percentage of exceptions to underwriting policies:	There are deminimis (<0.2%) exceptions to underwriting policy
Process and tools for the borrower identity check:	The solicitor acting for Paragon is required to complete identity checks in line with UK anti-money laundering regulation. In addition - data supplied by the credit reference agencies is used to check for M/L compliance.
Fraud prevention tools and % of applicants checked for fraud:	100% All cases are checked against Sira & Cifas databases.
Source of credit history checks:	Equifax and Credit safe are used as suppliers of consumer and commercial credit data within the underwriting process. All personal applicants and all corporate applicants are searched using these systems.
Credit history requirements:	No material adverse credit
Use of external credit bureau scores:	Personal Applicant -Equifax - Risk Navigator score - 320. Corporate applicants - Credit Safe - 30
Use of internal credit scores:	None
Methods used to assess borrowers' repayment capabilities:	All mortgages are BTL. A minimum interest coverage ratio is used to assess affordability. For non portfolio borrowers the ICR is determined by the tax band applicable to the applicants income. For basic tax payer = 125%, higher rate tax payer = 140%. For portfolio borrowers the ICR is determined using a combination of the tax band and the property type. Single self contained properties range from 125% - 140% and HMO's multi-unit blocks from 130% - 145%
Income taken into account in affordability calculations:	There is a minimum of £25k requirement in all cases
Other borrower's exposures (i.e. other debts) taken into account in affordability calculations:	Information on other debts and liabilities is collected and recorded and may be taken into account but the affordability assessment is driven by the property information.
Is interest rate stressed to calculate affordability?	The interest rate is stressed as follows: Current Affordability (ICR reference rate) – Non 5 year fixed product uses charging + 2% or 5.5%, whichever is greater – 5 year fixed currently uses 4% or product charging rate, whichever is greater Future Affordability – Non-5 year fixed products uses reversion rate + predicated change in bank base rate – 5 year fixed products uses reversion rate + 0.5% (outside of regulation)

Source: Paragon Banking Group

Exhibit 18

Originator Ability	At closing
Underwriting policies and procedures	
Is amortisation modified to calculate affordability for I/O/balloon loans?	No
Method used for income verification	Rental income is assessed by the Group's surveyors or by a group appointed panel valuer, the valuation which is validated by a Paragon group surveyor
Criteria for non-income verified and %:	Not applicable
Maximum age at maturity &assessment of income for pensioners:	Not applicable
Maximum loan size:	£25m (in aggregate)
Valuation types used for purchase & LTV limits:	Full physical inspection 80% (*)
Valuation types used for remortgage & LTV limits:	Full physical inspection 80%(*)
Valuation types used for further advances & LTV limits:	Full physical inspection 80%(*)
Valuation types & procedure for construction loans & LTV limits:	Not applicable
Valuation types & procedure for new built properties & LTV limits:	Full physical inspection 80%(*)
LTV limit for first-time-buyers/Buy-to-let/other (please specify and delete non relevant criteria):	Maximum LTV:80% up to £500k, 70% up to £1 million and 65% up to £2 million
Collateral valuation policies and procedures	
Value in the LTV calculation for underwriting purpose:	Lower of the purchase price or valuation
Value in the LTV recorded in database system if different than above	Lower of the purchase price and valuation (separately the purchase price)
Type, qualification and appointment of valuers:	Internal Surveyors Team (all RICS qualified 10 yrs post qualified experience). Where necessary we will instruct a panel surveyor (all RICS qualified) but these will be subject to a 100% audit by the internal surveyors function.
Monitoring of quality of valuers:	All valuations subject to a regular random audit conducted by senior audit surveyor.
Closing policies and procedures	
Quality check before releasing funds:	Letter/phone calls to confirm borrower information, validation that insurance is in place, check with notary, etc.
Entity responsible for the deed registration & time needed:	The solicitor acting for Paragon will register the charge in accordance with Paragon's instructions to solicitors
Data quality check (check that system and paper file match):	100%, via Image system
Credit risk management	
Credit risk team employees and experience:	The Credit Risk team comprises 27 individuals engaged in both quantitative and qualitative risk management activities. The experience of individuals is commensurate with their roles, ranging from recent graduate recruits to those with over 35 years banking experience. The team is led by the Credit Risk Director and supported by three Heads of function (Property, Data Science and Credit Risk).
Reporting line of Chief Risk Officer :	Chief Executive Officer
Ability to track loan performance by specific loan characteristics?:	Yes, performance can be tracked by any characteristic recorded on Paragon system. E.g. originator, valuer, solicitor, loan size, score etc.

(*) Due to COVID-19 restrictions (which applied until 22 May 2020 in England and 23 June 2020 in Wales) physical property valuations could not be conducted by Paragon. During this period, Paragon developed a desktop valuation process specifically for non-complex properties in relation to single self-contained units i.e. houses and flats, with up to four tenants sharing. Each desktop appraisal was then given a “category rating” being a confidence level from 1 to 4, with 1 being high and 4 being low. The process was subject to an oversight to the three lines of defence approach. This specifically included quality monitoring within the business area (first line), followed by oversight review by property risk (second line) and internal audit (third line).

Source: Paragon Banking Group

Exhibit 19

Originator Stability:	At closing
Quality controls and audits	
Responsibility of quality assurance:	Independent team (part of team of six) under the control of a team leader (separate to the underwriting area)
Number of files per month being monitored:	100% audit post offer and post completion with findings passed back to underwriting team leader on a monthly basis.
Recording of quality assurance findings and analysis of causes:	Yes and Yes
Frequency of operational audits for the underwriting processes:	Annually
Management strength and staff quality	
Average turnover of underwriters:	Average turnover of underwriters for the last 2 years 1st Apr 18 to 31st Mar 19: 7 leavers and 7 new starters 1st Apr 17 to 31st Mar 18: 1 leaver and 12 new starters
Training of new hires and existing staff:	Buddy principle - mixing training with 4 eye review (finally hierarchical mandate approval process). Then ongoing review for quality.
Technology	
Main software used:	ARIES is the core component of the Paragon First Mortgage systems that support all phases of flexible, repayment, endowment, rest or interest only mortgage operations, from initial application processing through servicing, accounting and collections. There are interfaces to the general ledger accounting System 21 and to various administrative systems used by finance and treasury operations. The software schedule is operated through ROBOT. A monthly process known as the collection run calculates the monthly interest owed by the customer, generates insurance premiums and creates an extract file of customer payments to be submitted to BACS. Overnight, weekly and monthly process produces reports and statistical information on redemptions, mortgage arrears and insurance premiums.
Tools/infrastructure available:	See below
Back-up server synchronisation and distance from main server:	Paragon uses two IBM I Power 7 (previously known as iSeries and earlier as AS/400) computers to operate all its product application, account administration and general ledger systems. POWER 7 (P7) processor technology is designed to deliver performance, scalability, reliability, and manageability that is required for the high I/O and memory applications used by the Group. The Power 720 server is a high-performance, energy efficient, reliable, and secure infrastructure and application server with innovative workload-optimizing and energy management technologies.
Frequency of disaster recovery plan test:	Tests are carried out on a monthly basis with a full test of the BCP taking place annually. A full exercise schedule is signed off annually by the BC Working Group.
Securitisation related	
%age of book securitised	As at September 2020, the securitised assets, as a percentage of the buy to let assets, was approximately 42.38%.
Previous experience with buy backs from securitisations	There have been no recent repurchases. Historically, there has been one repurchase where the solicitor failed to register Paragon's charge.

Source: Paragon Banking Group

Appendix 2: Summary of the servicer's collection procedures

Exhibit 20

Servicer Ability	At closing
Loan administration	
Entities involved in loan administration:	None
Abandonment rate (% call not answered within 20 seconds):	Less than 1% Collections
Early arrears management	
Entities involved in early stage arrears:	Internal Collections team
Hours & days of operation:	Mon to Fri 8am to 8pm. Sat 8am to 5pm
Ratio of loans per collector (FTE)1:	Around
Definition of arrears & default	UK Standard - 3 periods
Pre-arrears strategy: Do you contact the borrower to remind that the payment prior to account is due?	Yes
Pre-arrears strategy: If yes, how do you select the account to be called,	Behavioural analysis and proactive arrangement contact
Arrears strategy for 1-29 days delinquent (please select and if needed customise the relevant option)	From day 1 - letter sent & collection calls, supported with Field Calls and daily attempts at contact
Arrears strategy for 30 to 59 days delinquent (please select and if needed customise the relevant option)	From day 30 - as above
Arrears strategy for 60 to 89 days delinquent (please select and if needed customise the relevant option)	At Day 60 - normally final pre-Receiver-of-Rent Field Call and then instruction of Receiver-of-Rent
	From day 60-90 Receiver-of-Rent normally appointed
	Simultaneous collections contact continues
Arrears strategy for 90 days or more delinquent to late stage (please select and if needed customise the relevant option)	Receiver-of-Rent normally appointed
Prioritisation rules for delinquent accounts:	Level of arrears, type of portfolio, payment type missed
Use of historical payment behaviour in the collection strategy:	Aged history used showing arrears now, previous month and previous year
Data enhancement if borrower is not contactable:	Field calls, directory enquiries, bank letters and trace companies
Reason for non-payment:	Arrears reason code data collected
Loss mitigation and asset management practices:	
Transfer of a loan to the late stage arrears team:	Normally Receiver-of-Rent from Day 60 and Pre-Salvage where forecast loss subsequently identified at Day 60
Entities involved in late stage arrears:	Collections, Portfolio Relationship, Receiver, Field Team
Entities involved in loss mitigation	Portfolio Relationship, Pre-Salvage, Receiver, Litigation, Negligence review, external solicitors, Telephone Collections
Hours & days of operation:	Telephone Collections as per Early Arrears Management. Other units normally Mon to Fri, 8.30am to 5.00pm
Ratio of loans per collector (FTE):	Included in previous figure for collections
Analysis performed to assess/propose loss mitigation solutions:	Review including LTV, interest due vs. interest paid, pre-salvage review, information from PRM visits and negligence review
Types of loss mitigation solutions including percentage defined as the number of accounts which were 30+ delinquent for which one solution has been applied divided by the total number of accounts which were 30+ delinquent over the past 12 months.	N/A
Role of field agents:	Supporting Receiver-of-Rent in tenant contact and property management
Borrowers re-defaulting 90 days or more after loss mitigation:	N/A
Contact with borrower during the legal process:	N/A
Time from first default to litigation and from litigation to sale:	N/A
Average recovery rate on closed files, recovery time and change in price of properties sold:	N/A

Source: Paragon Banking Group

Exhibit 21

Servicer Stability

IT and reporting	
Main software used and its operating manual:	ARIES is the core component of the Paragon First Mortgage systems that support all phases of flexible, repayment, endowment, rest or interest only mortgage operations, from initial application processing through servicing, accounting and collections. There are interfaces to the general ledger accounting System 21 and to various administrative systems used by finance and treasury operations. The software schedule is operated through ROBOT. A monthly process known as the collection run calculates the monthly interest owed by the customer, generates insurance premiums and creates an extract file of customer payments to be submitted to BACS. Overnight, weekly and monthly process produces reports and statistical information on redemptions, mortgage arrears and insurance premiums.
Tools/infrastructure available:	Please see above
Automatic tracking and reporting of specific characteristics:	Generic Event management System (GEMS)
Back-up server synchronisation and distance from main server:	Paragon uses two IBM I Power 7 (previously known as iSeries and earlier as AS/400) computers to operate all its product application, account administration and general ledger systems. POWER 7 (P7) processor technology is designed to deliver performance, scalability, reliability, and manageability that is required for the high I/O and memory applications used by the Group. The Power 720 server is a high-performance, energy efficient, reliable, and secure infrastructure and application server with innovative workload-optimizing and energy management technologies.
Frequency of disaster recovery plan test:	Tests are carried out on a monthly basis with a full test of the BCP taking place annually. A full exercise schedule is signed off annually by the BC Working Group.
Main software used and its operating manual:	ARIES is the core component of the Paragon First Mortgage systems that support all phases of flexible, repayment, endowment, rest or interest only mortgage operations, from initial application processing through servicing, accounting and collections. There are interfaces to the general ledger accounting System 21 and to various administrative systems used by finance and treasury operations. The software schedule is operated through ROBOT. A monthly process known as the collection run calculates the monthly interest owed by the customer, generates insurance premiums and creates an extract file of customer payments to be submitted to BACS. Overnight, weekly and monthly process produces reports and statistical information on redemptions, mortgage arrears and insurance premiums.
Tools/infrastructure available:	Please see above
Automatic tracking and reporting of specific characteristics:	Generic Event management System (GEMS)
Securitisation related	
Securitised loans in the servicers portfolio	As at September 2020, the securitised assets, as a percentage of the buy to let assets, was approximately 42.38%.
Are defaulted loans in the securitisations checked for breach of	Some cases are referred to the Securitisation Compliance area

Source: Paragon Banking Group

Appendix 3: Originator and servicer reviews

Exhibit 22

Summary of originator and servicer assessment

Originator Assessment	Main Strengths (+) and Challenges(-)
Overall assessment:	Average
Originator ability	
Sales & marketing practices	+ Separate sales and underwriting function
	+ One-to-one meetings with professional landlords
	- Origination channels: 90% brokers vs. 10% packagers
Underwriting policies & procedures	+ Depending on the complexity of the file underwriters undewrite 2 - 4 applications per day
	+ No exceptions allowed.
	+ No CCJ and no self-certification
	- Income data is collected yet is not relied upon in the affordability calculation
Property valuation policies & procedures	+/- Full internal valuation performed by internal qualified surveyors with 10 years of qualified experience. Expertise on rentability of property is needed.
Closing policies & procedures	+ All checks are performed through notary with all documents being imaged
Credit risk management	- Specific product though moving more to more risky non-professional landlords
	+ Independent risk management team with separate reporting lines.
	+ Average credit risk experience of management is 20 years
	+/- No changes to underwriting criteria since previous issuance
Originator stability	
Quality control & audit	+ Independent team with 6 people in their team. Small centralised team that can do the checks on underwriters locally.
Management strength & staff quality	+ Average experience of underwriter's manager is 17 years
	+ Large part of underwriting have more than ten years' experience
	+ Training involves "buddy" principle with four eyes review
Technology	+/- Internally built system
	+ Timely information received upon request
	+ Documents are scanned and are available in the head office.
Servicer Assessment:	**Main Strengths (+) and Challenges(-)**
Overall assessment:	Average
Servicer ability	
Loan administration	+ All loan administration functions performed centrally
	+ 100% of collections through direct debit
Early arrears management	+ Early warning signs used such as cancelled direct debits and through monthly external credit checks for all loans.
	+ Proactive and early contacting of the borrowers.
Loss mitigation and asset management	+ Few repossessions and low losses
	+ Ability to implement portfolio based recovery measures
	- Active receiver of rent strategy to mitigate losses
Servicer stability	
Management strength & staff quality	+ Very experienced staff
	+ Low turnover
IT & Reporting	+ Frequent back up testing.
Quality control & audit	+ Overall robust quality control framework
	+ Daily audits to examine the adequacy between issues encountered by borrowers and action taken by collectors
Strength of back-up servicer arrangement:	+ Warm

Sources: Moody's Investors Service based on information provided by Paragon

Endnotes

1 See Approach to Assessing Counterparty Risks in Structured Finance, June 2020.

2 See Approach to Assessing Counterparty Risks in Structured Finance, June 2020.

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