

U.K. Mortgage Market Expectations: A Midsummer Night's Dream or Nightmare?



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Today's Speakers

Economics & Business Analytics



Luca Magni
Associate Director



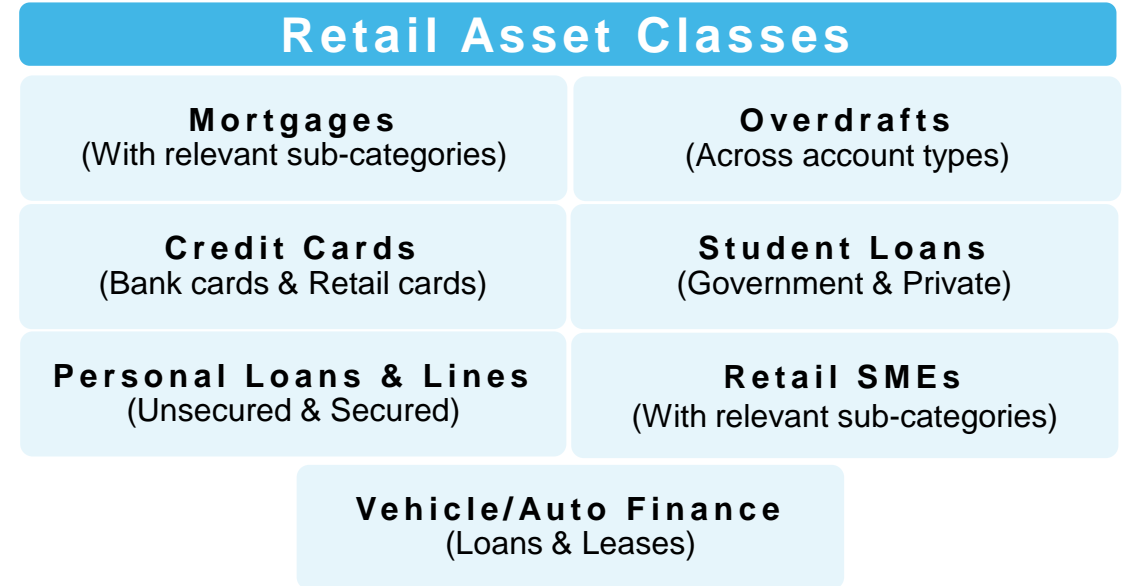
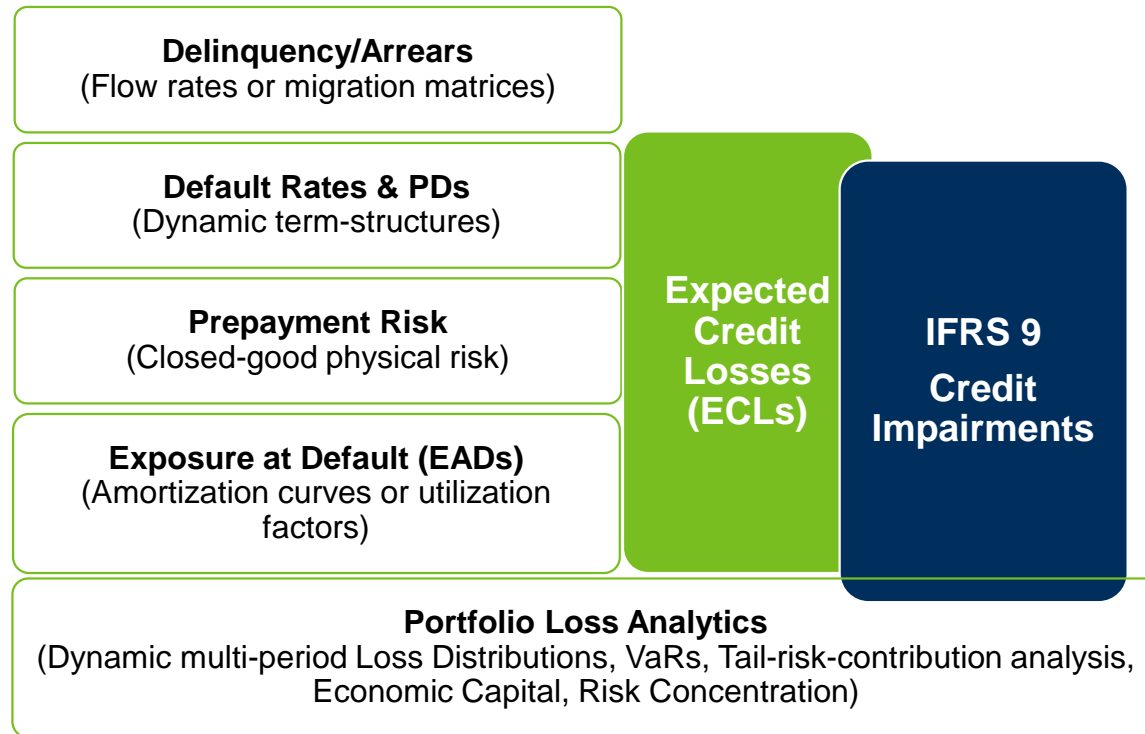
Petr Zemcik, PhD
Senior Director



Chiara Maria Ventura
Assistant Director, Risk Modeler

Portfolio Analyser (PA) Suite of Models

Retail loan-level econometric models for credit and impairment metrics



Agenda

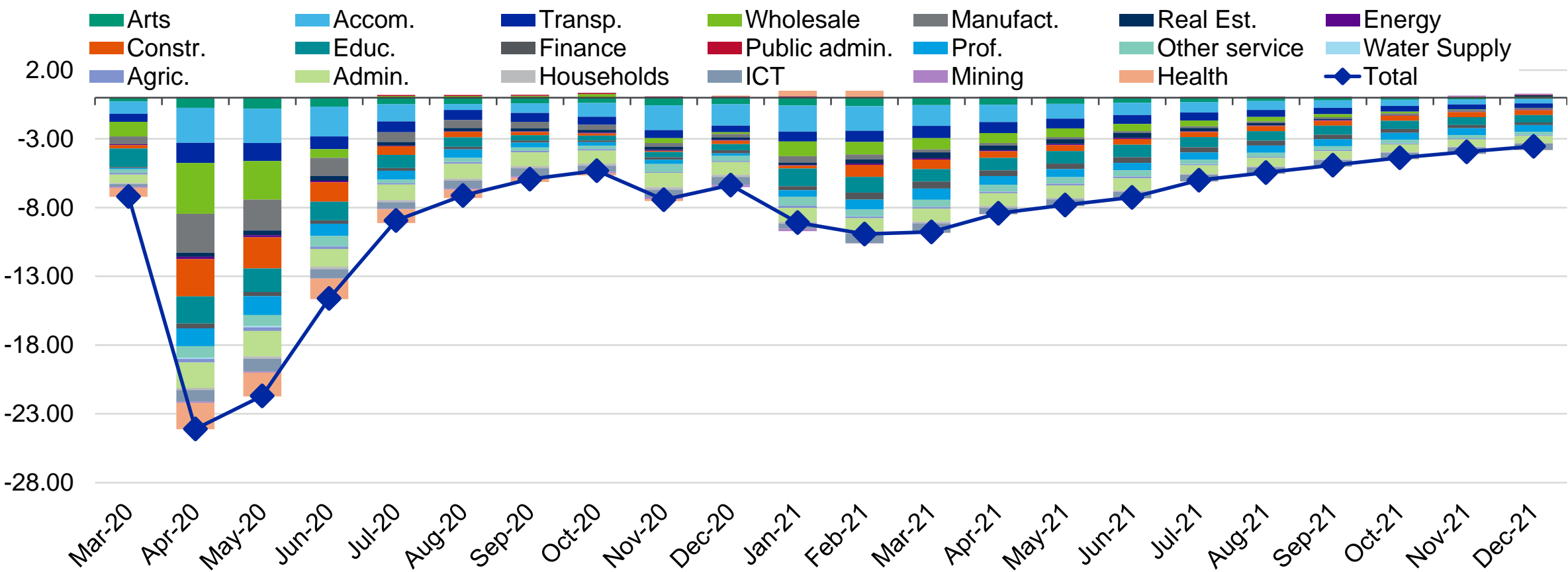
1. Economic Outlook for the U.K.
2. Moody's Forecasts & PRA 2021 Stress Scenario
3. Payment Holidays and the U.K. Mortgages
4. Risk Parameters & Expect Losses

1

Economic Outlook for the U.K.

Gradual Recovery on the Horizon

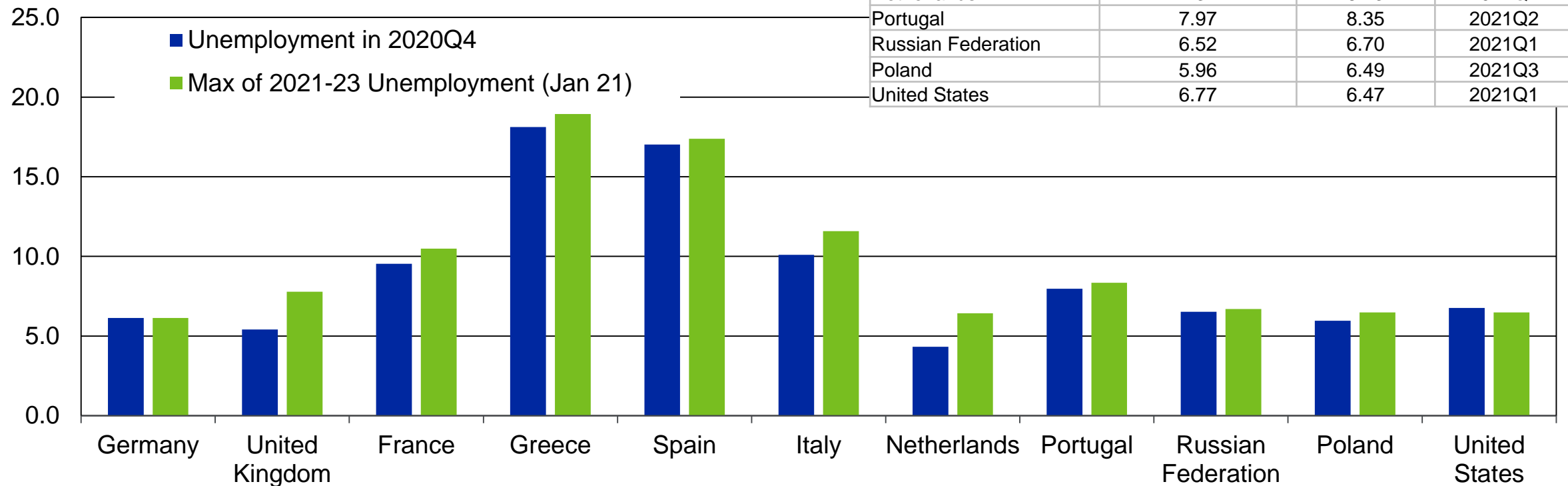
Deviation from normal level of activity, ppts, by industry, March forecast



Sources: Moody's Analytics calculated

Unemployment Increases

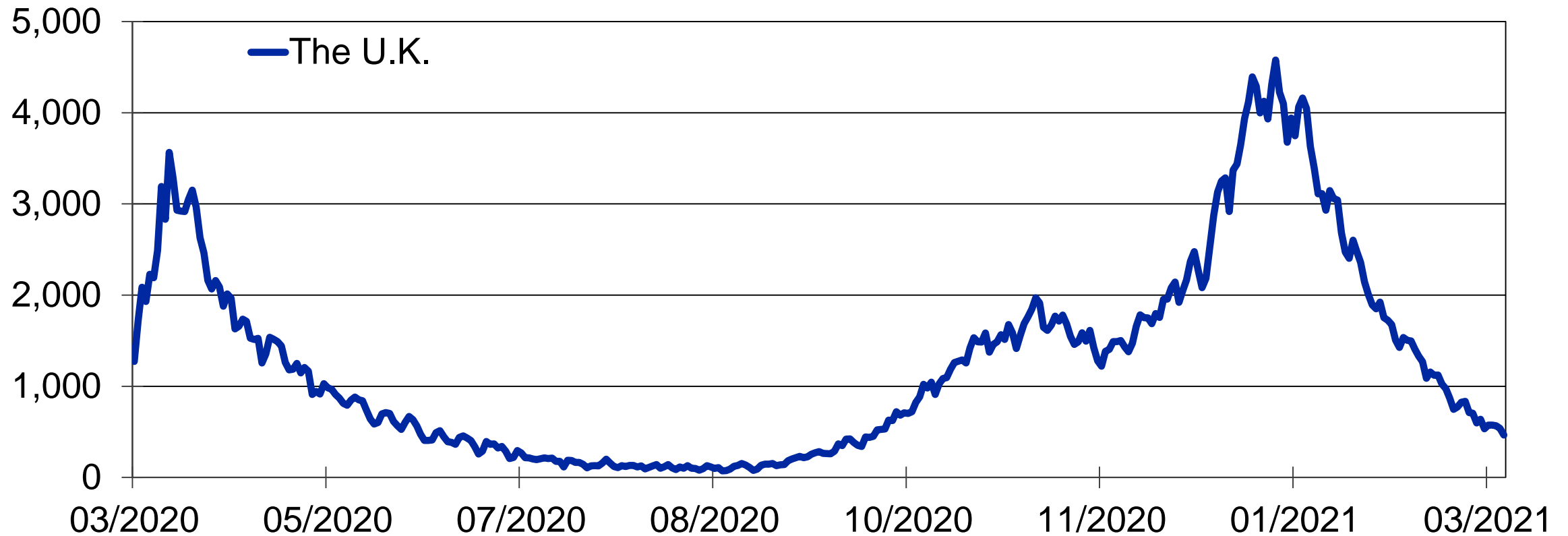
Shift of baseline scenarios



Sources: Moody's Analytics

U.K. Hospitalizations Decline

Number of patients admitted to hospital



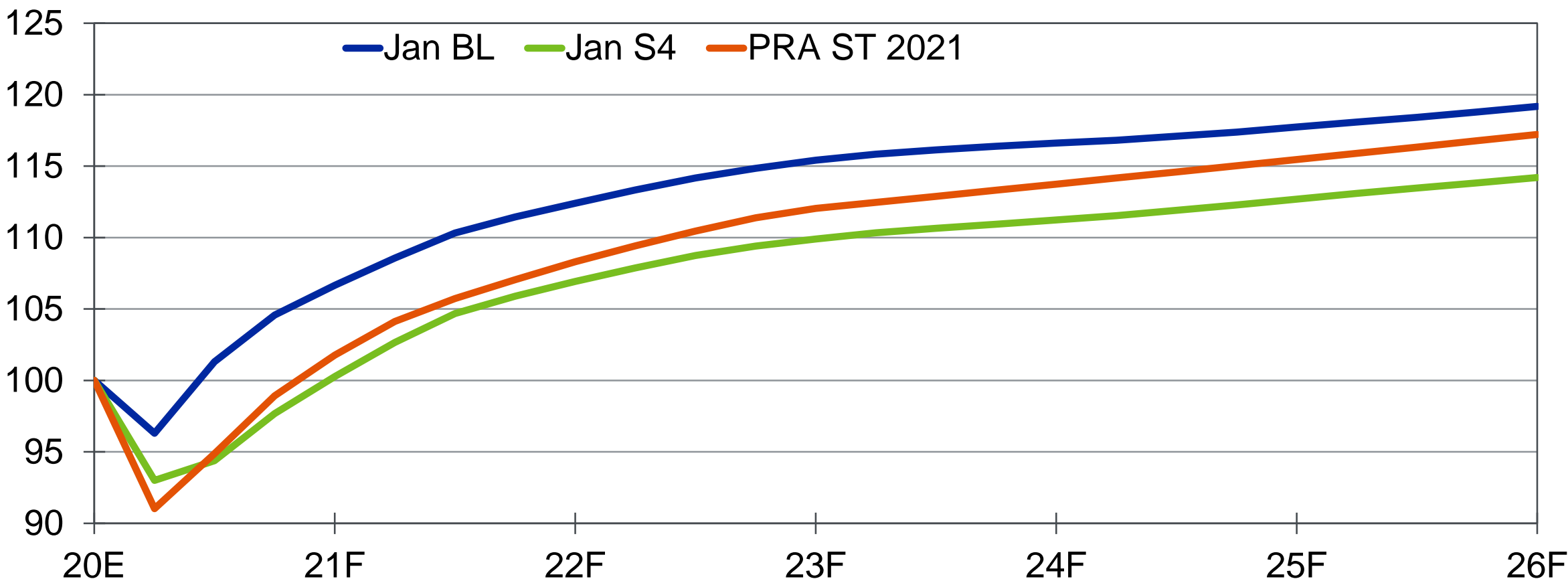
Sources: WHO, Moody's Analytics

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Moody's Analytics Forecasts & PRA 2021 Stress Scenario

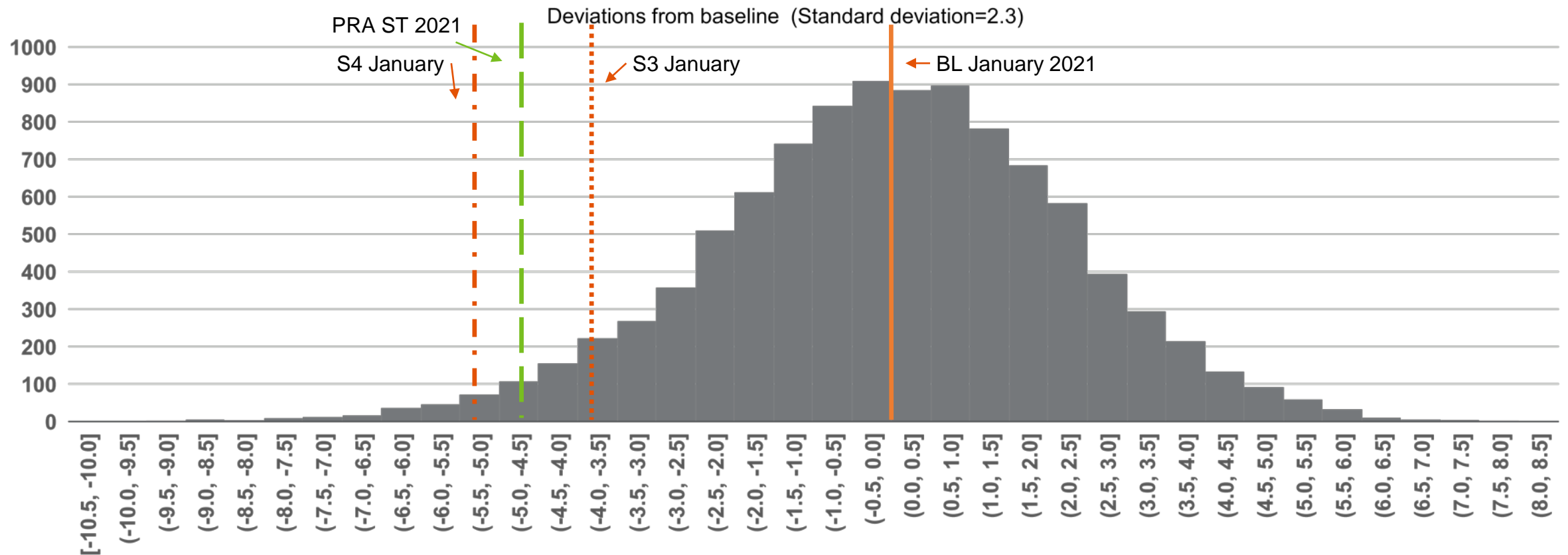
GDP Declines

U.K. real GDP, 2020Q4=100



Sources: U.K. Office for National Statistics (ONS); Moody's Analytics

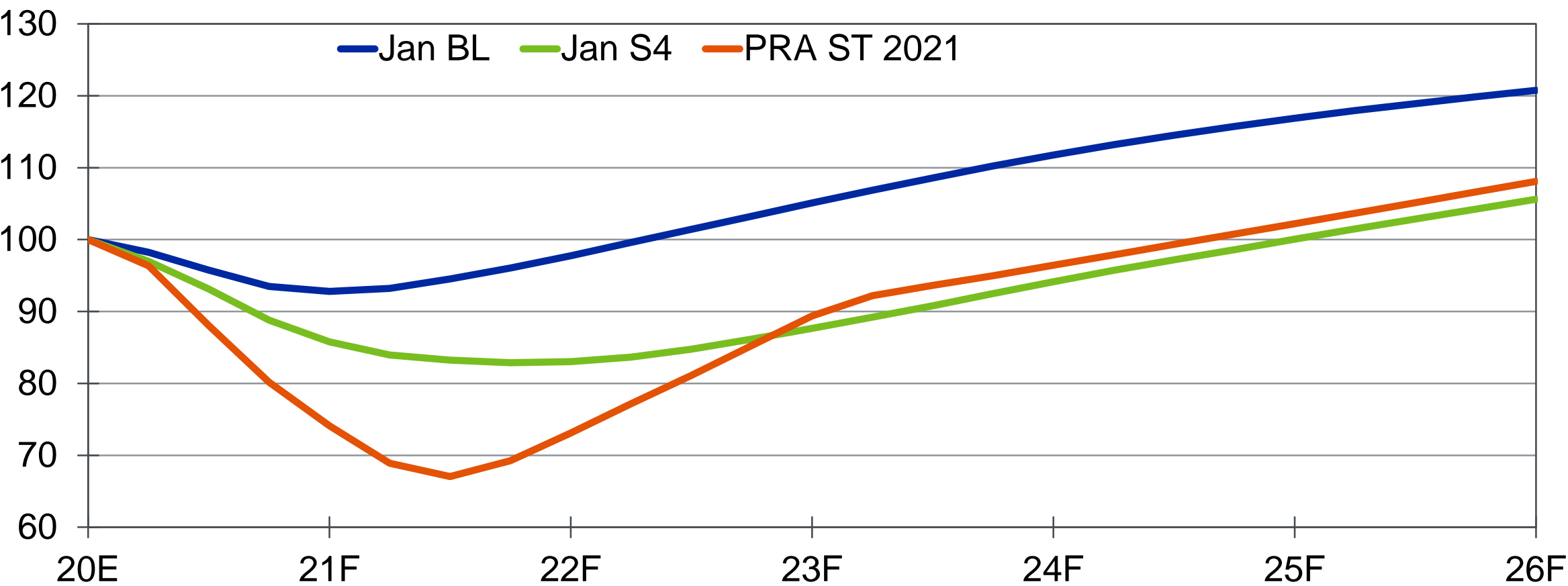
Severity, Avg. Deviations From Baseline, %



Sources: Moody's Analytics

House Prices in Doldrums

U.K. house price index, 2020Q4=100



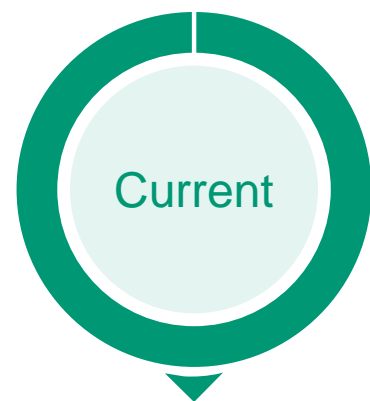
Sources: Land Registry; U.K. Office for National Statistics (ONS); Moody's Analytics

3

Payment Holidays and the U.K. Mortgages

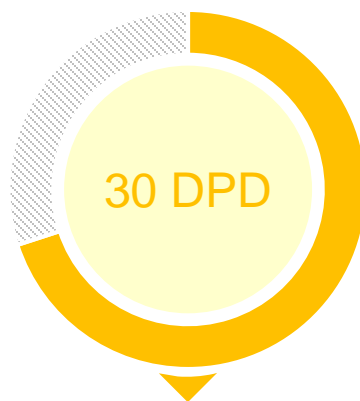
Definition of Synthetic Arrears Status

Payment holiday was offered to borrowers who faced financial difficulties due to Covid-19 outbreak



Current accounts

All current accounts with regular observed loan repayments.



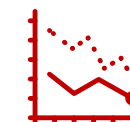
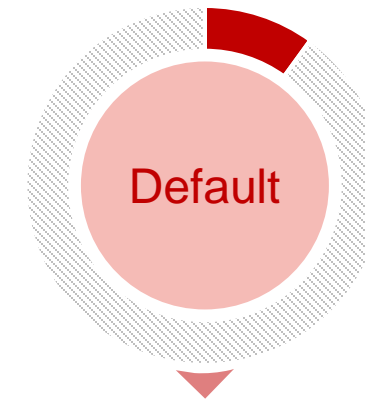
30 DPD accounts

- » DPD30 arrears bucket.
- » Account status is "Current" and no observed repayments over the last month.



60 DPD accounts

- » DPD60 arrears bucket.
- » Account status is "Current" or "DPD30" and no observed repayments over the last 2 months.



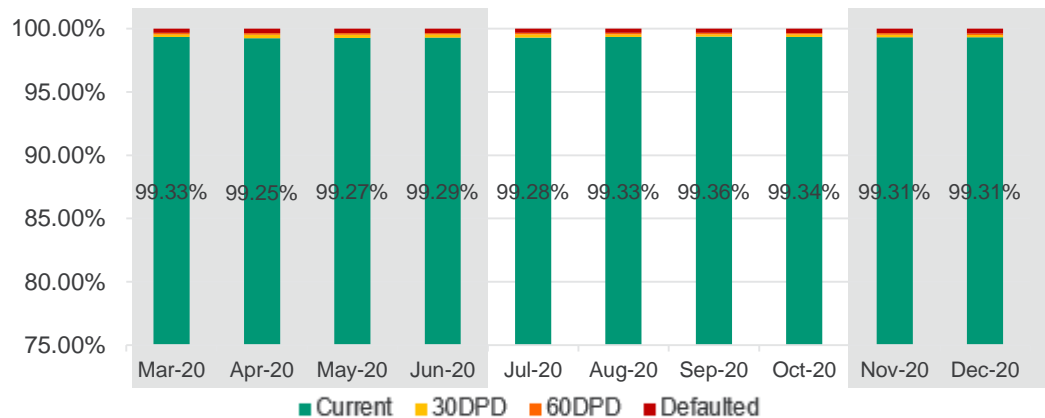
Defaulted accounts

- » Defaulted account.
- » No observed repayments over the last 3 months.

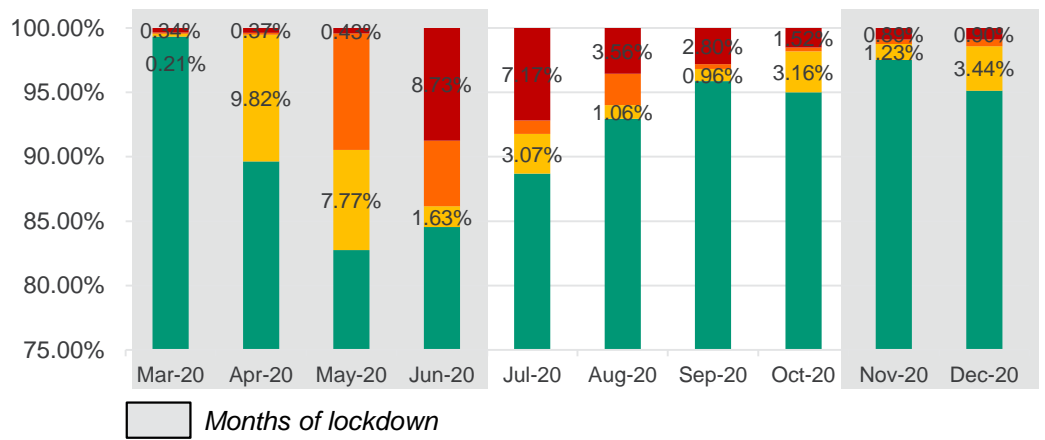
EDW Mortgage Data in 2020

Loan's performance during the pandemic

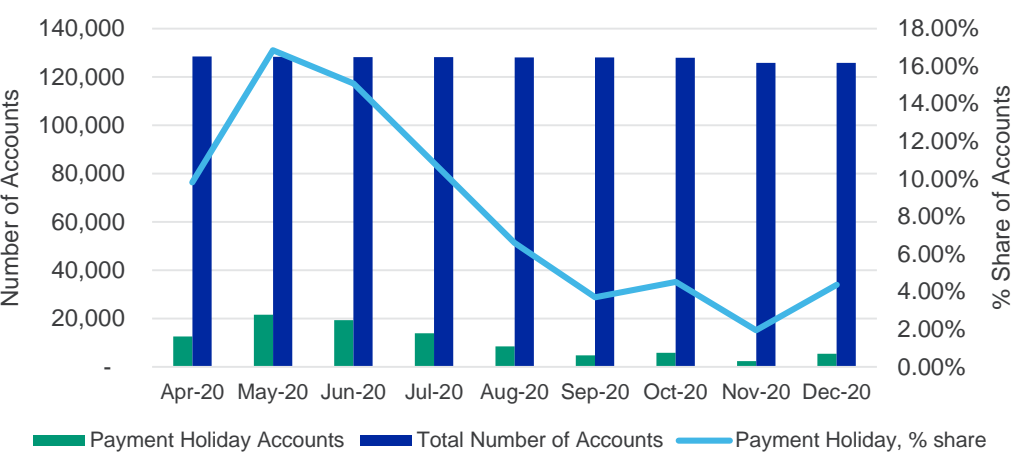
Original Arrears Status Distribution (%)



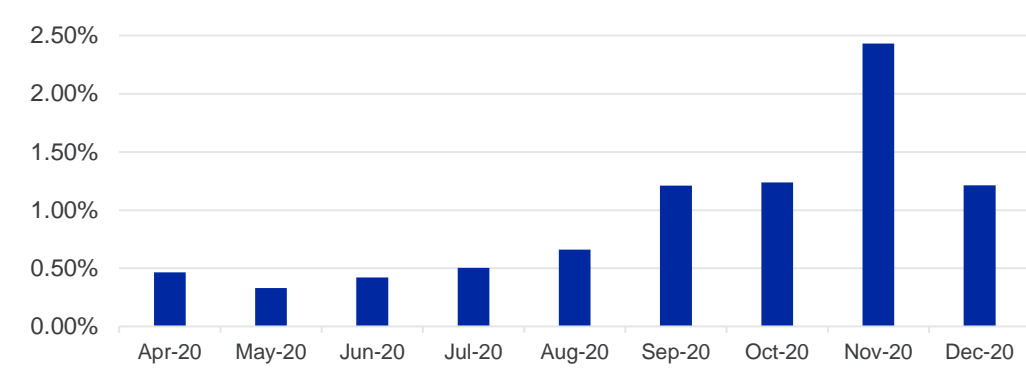
Synthetic Arrears Status Distribution (%)



Payment holiday accounts

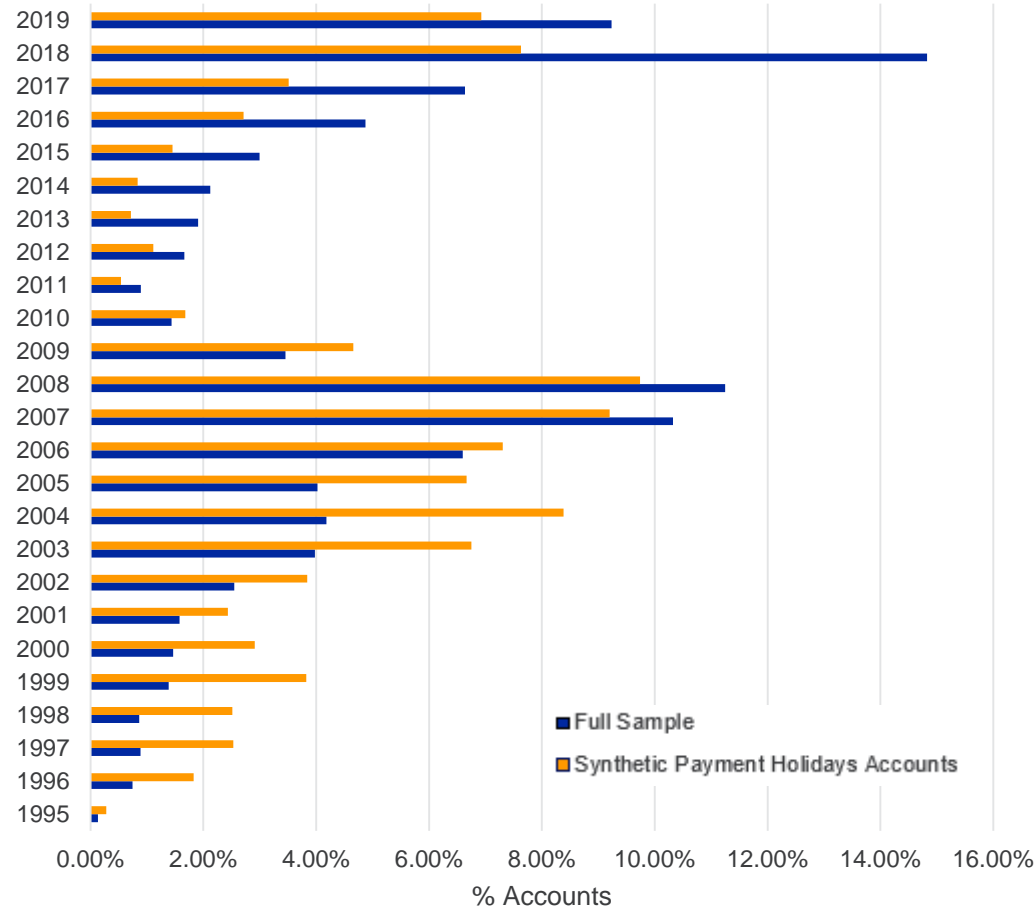


Average balance increase



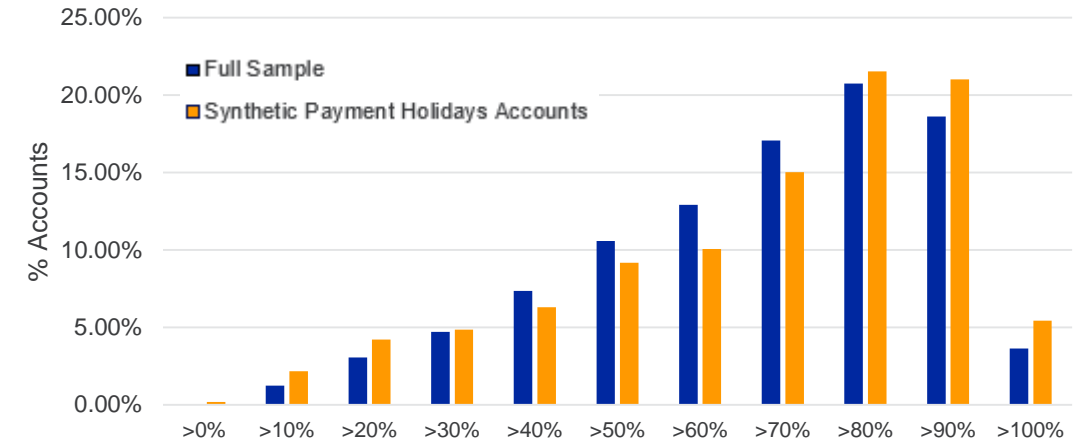
Characterizing the Loans

Vintage of Origination

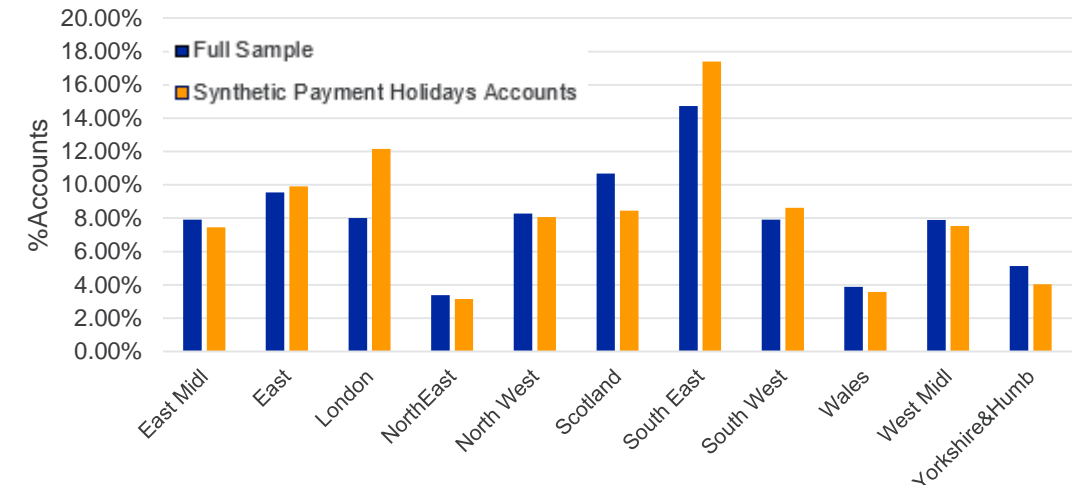


125,786 mortgages in Dec 2020, 12,149 m£ outstanding balance

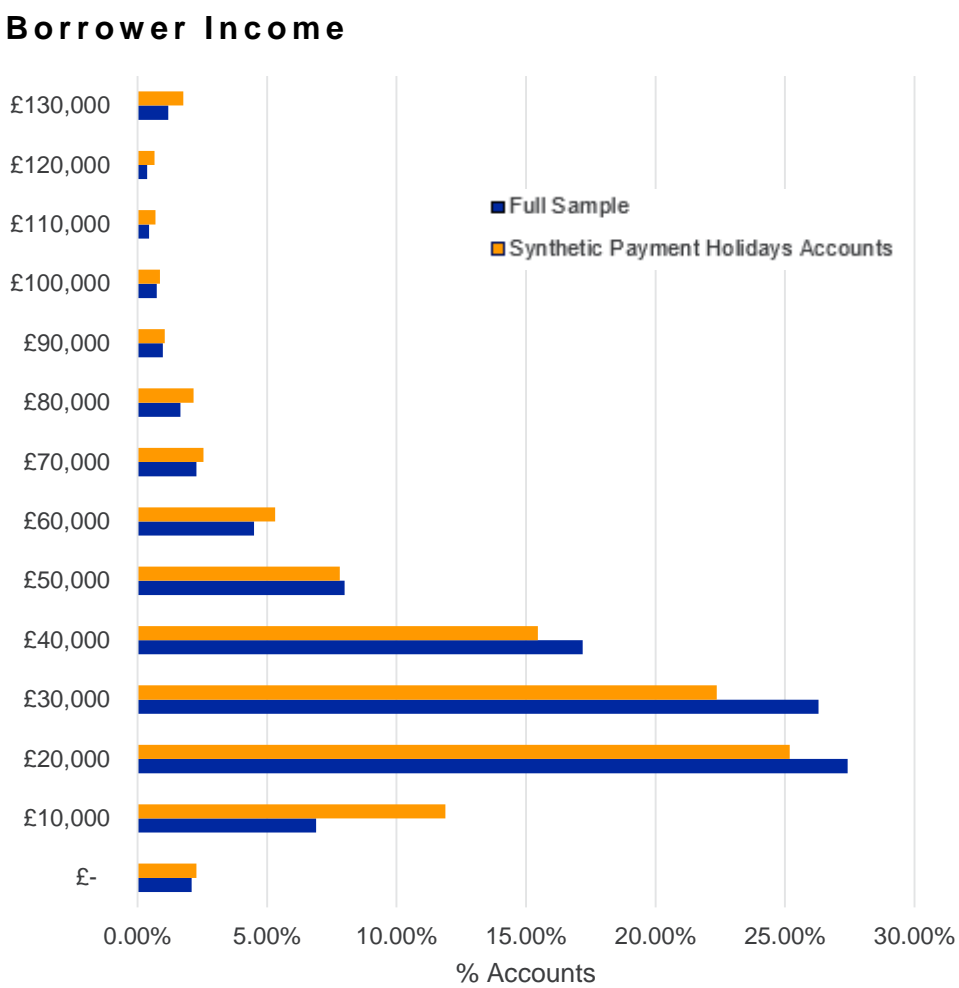
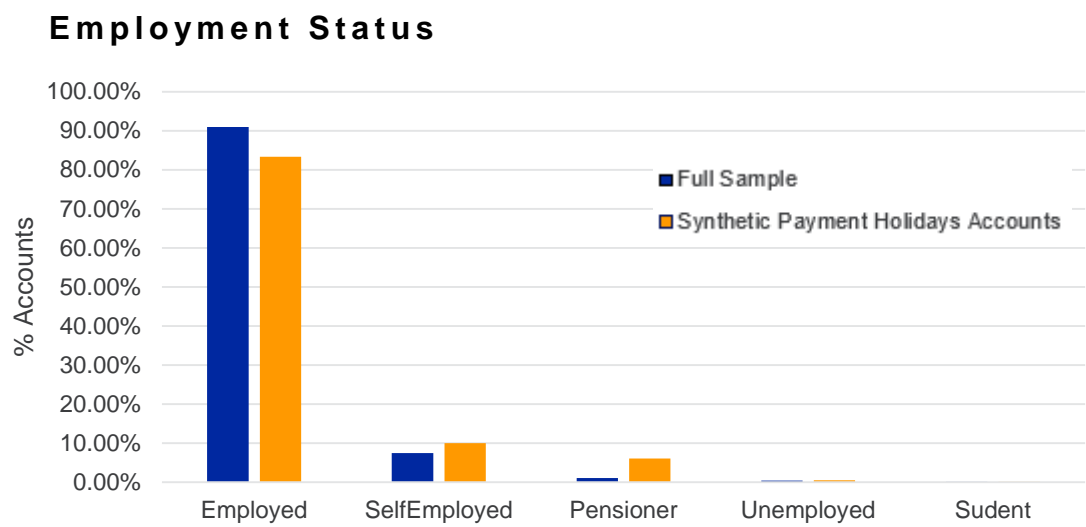
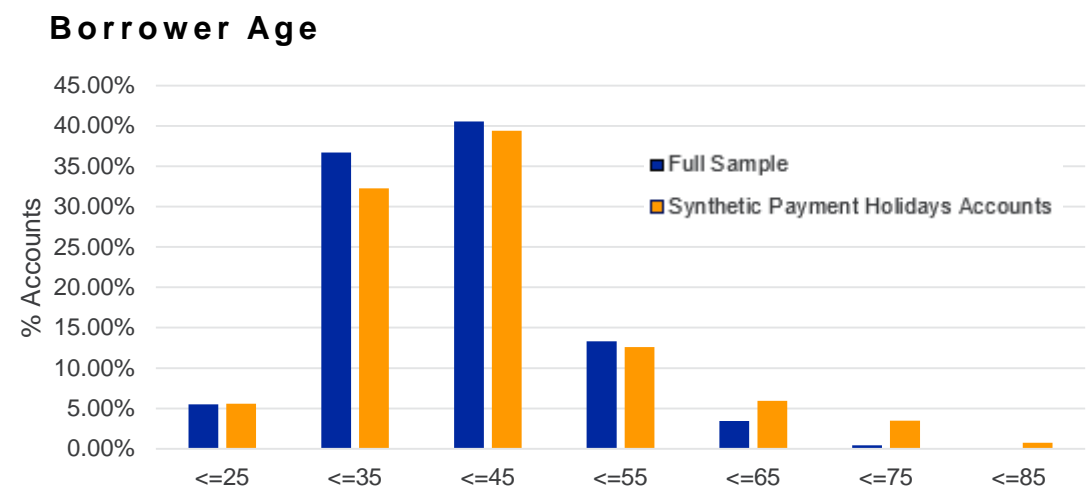
LTV at origination



Geographic Region



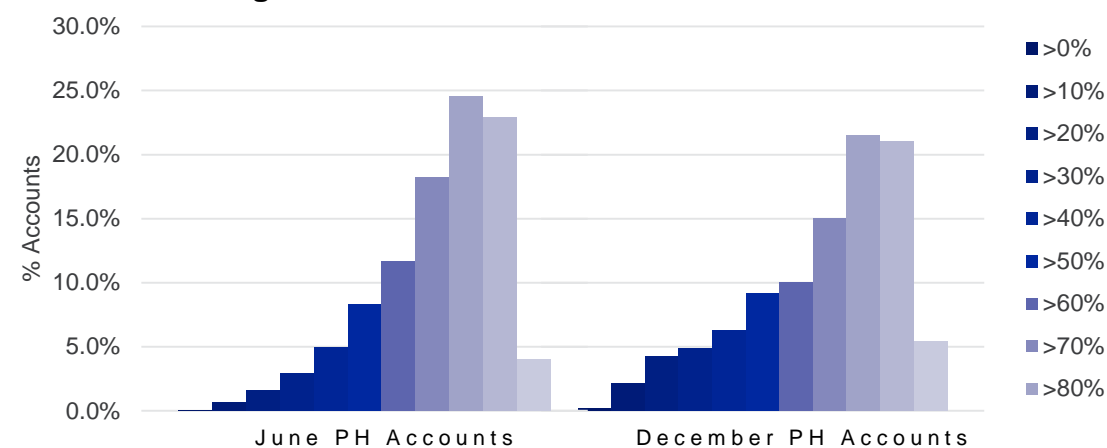
Characterizing the Borrowers



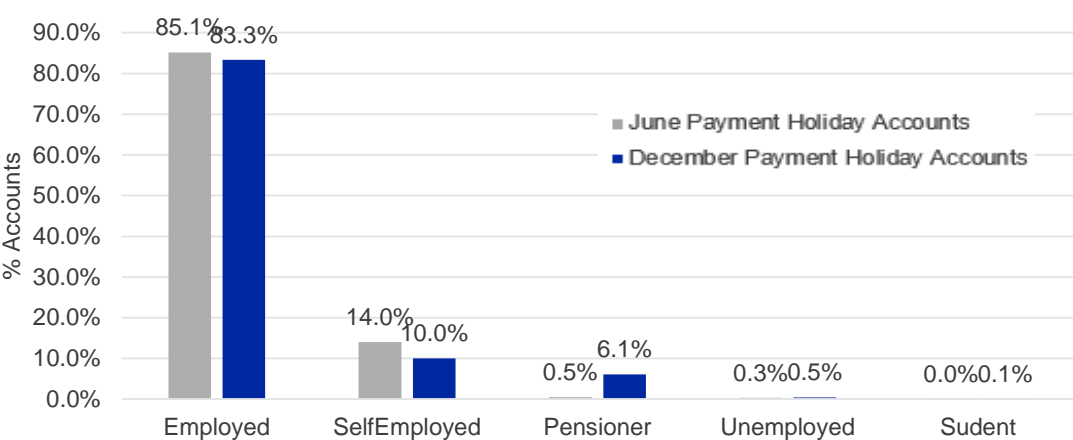
125,786 mortgages in Dec 2020, 12,149 m£ outstanding balance

A Shift in Payment Holidays Population

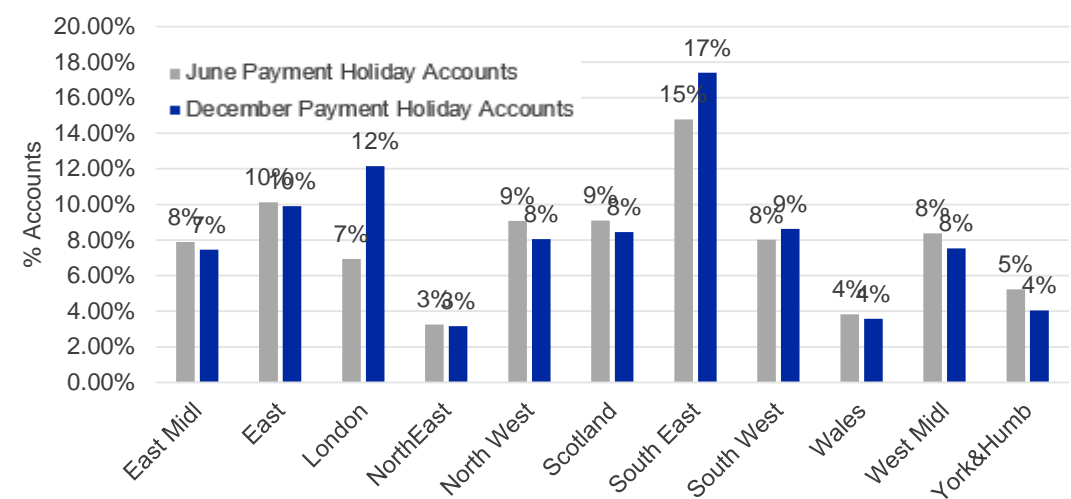
LTV at origination



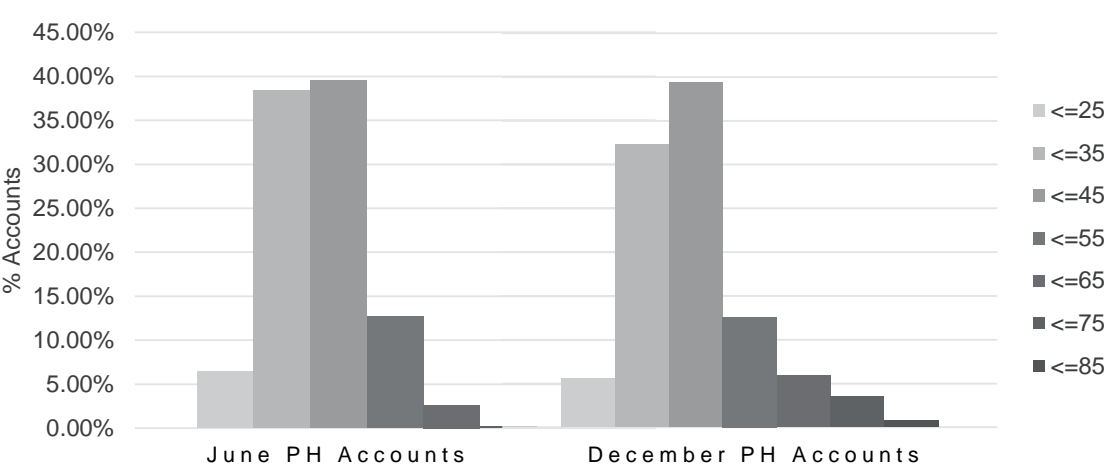
Employment Status



Geographical Region



Borrower Age

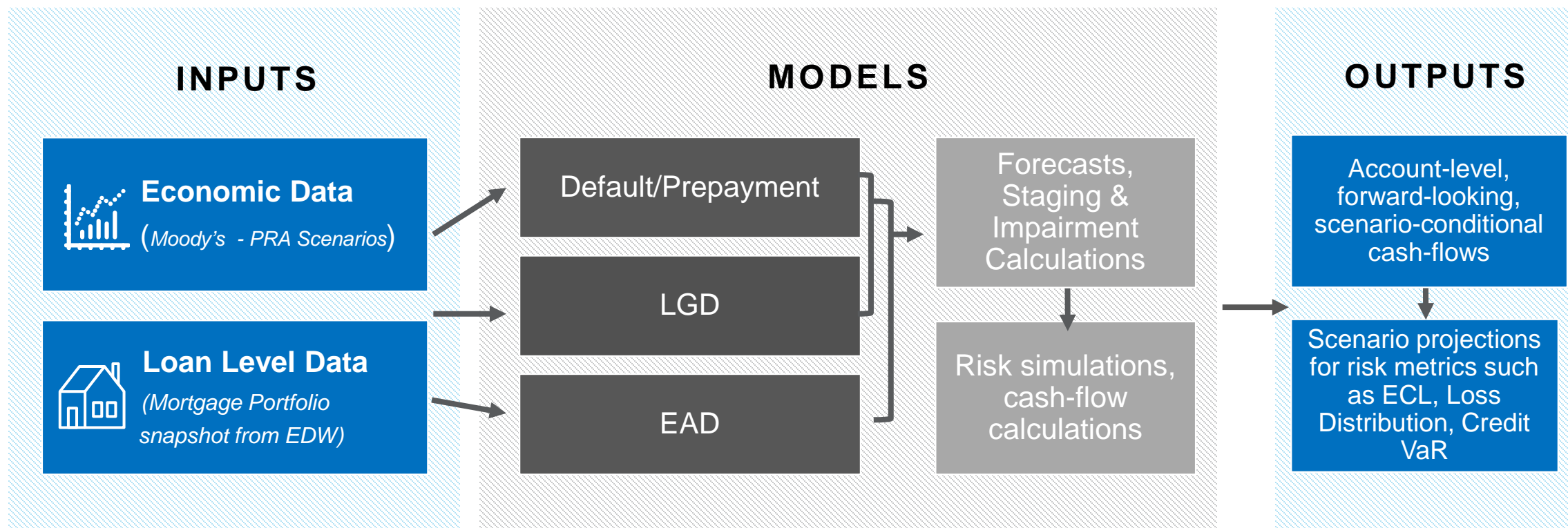


4

Risk Parameters & Expect Losses

Modular Structure for Consumer Loans Analysis

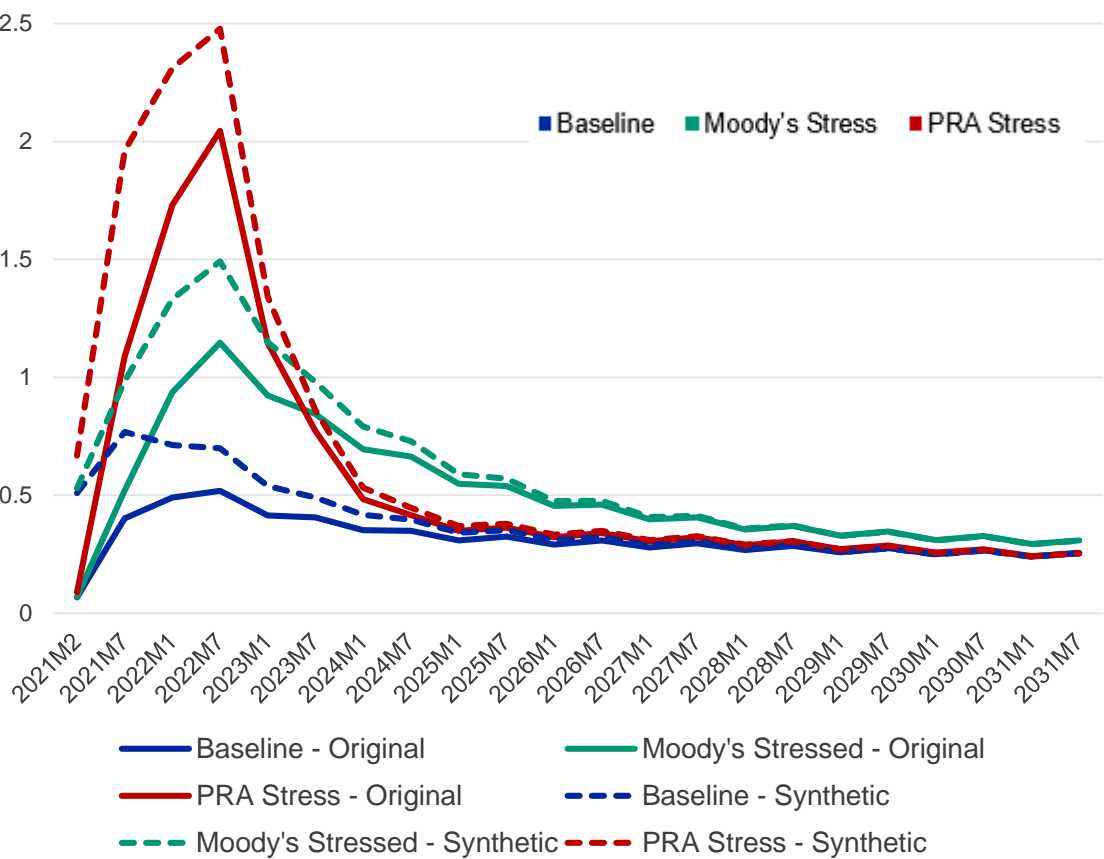
The case of U.K. Mortgages using Moody's Analytics Mortgage Portfolio Analyser



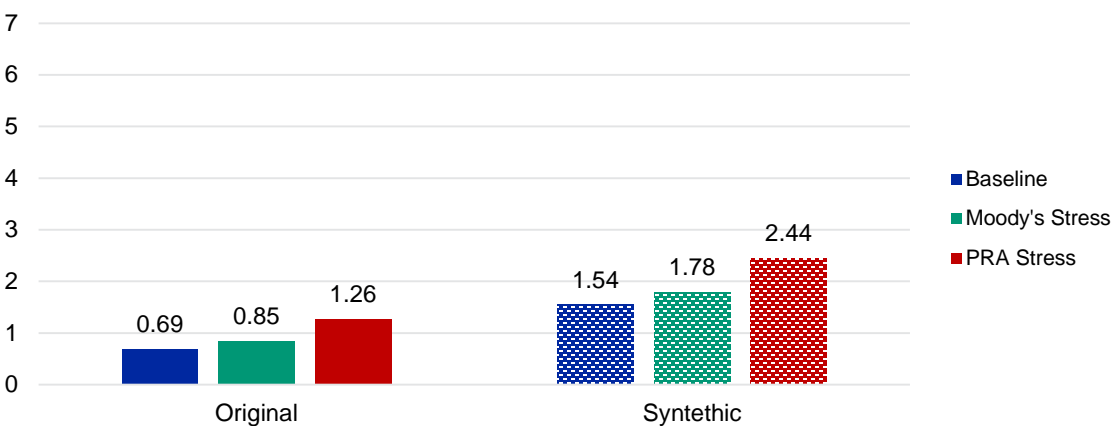
Impact of Stressed Scenario on Risk Metrics

December snapshot

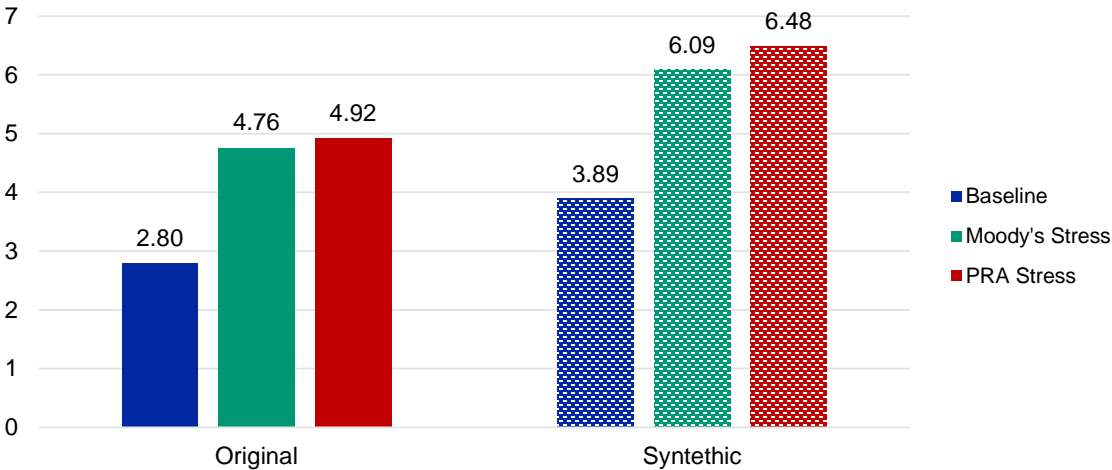
Annualized conditional PD, %



Weighted average 12-month PD, %



Weighted average Lifetime PD, %

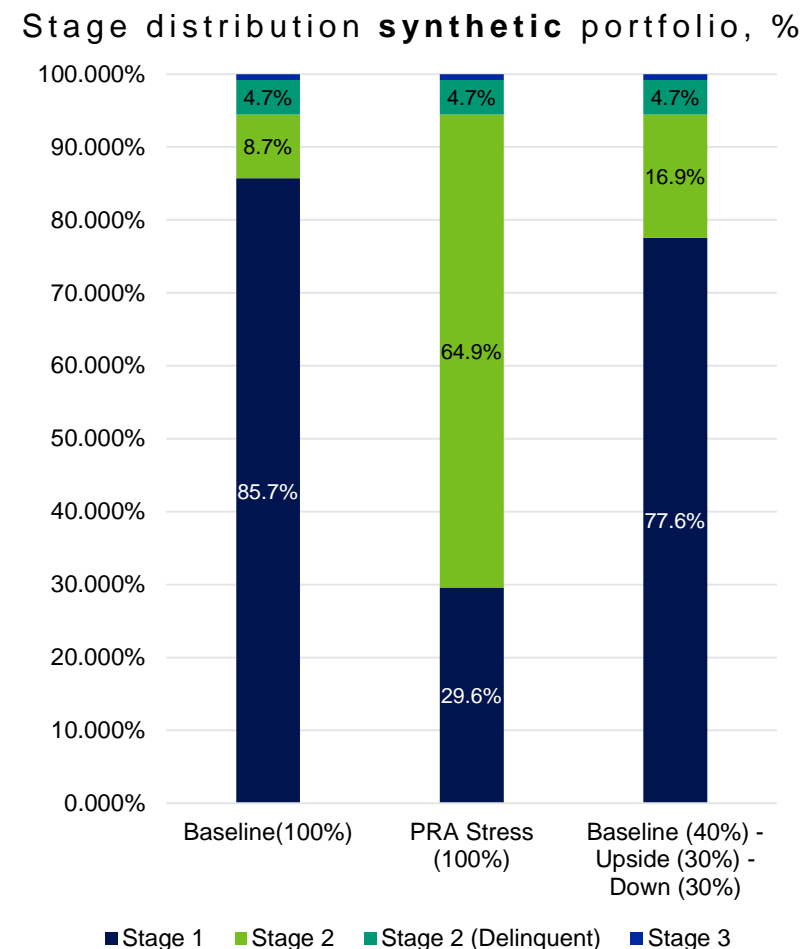
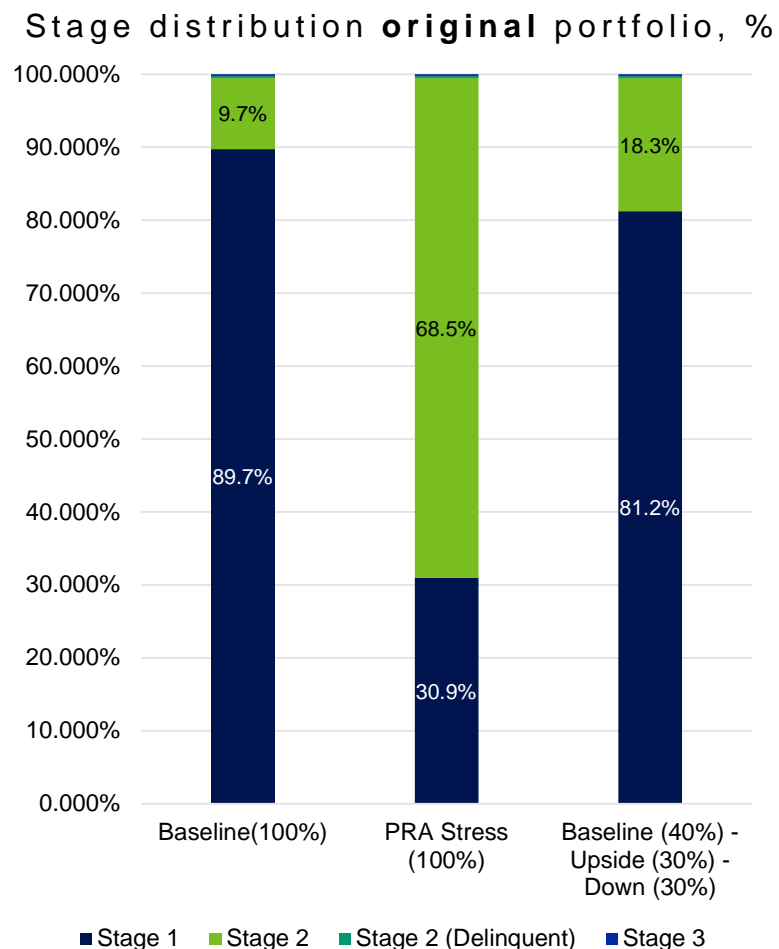


Impact of Covid-19 on December Snapshot ECL

Combined effect: stressed scenarios and synthetic arrears status

IFRS9 Scenario weighted combinations:

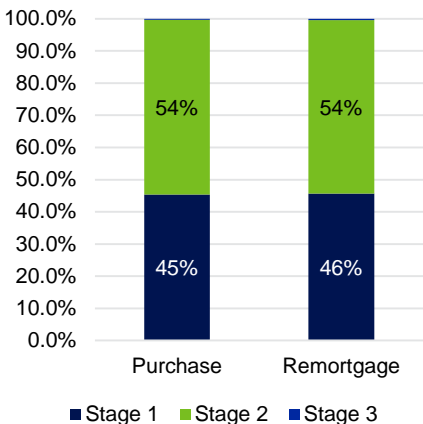
- » Moody's Analytics Baseline (100%)
- » PRA Stress (100%)
- » Moody's Baseline (40%), Upside (30%) and Downside (30%)



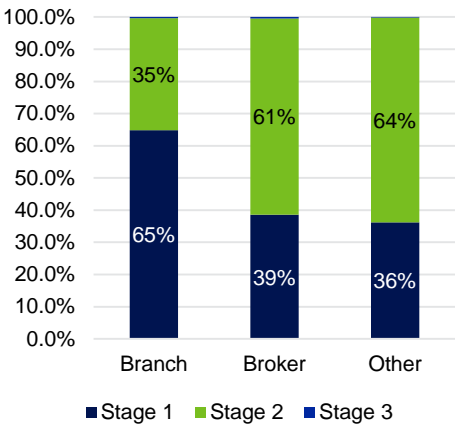
Stage Distribution Profile

MPA identification of accounts with Significant Increase in Credit Risk

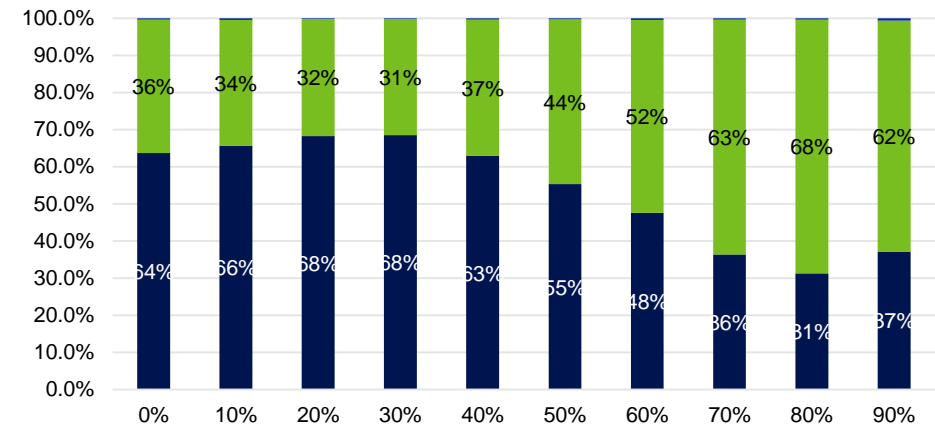
Purpose



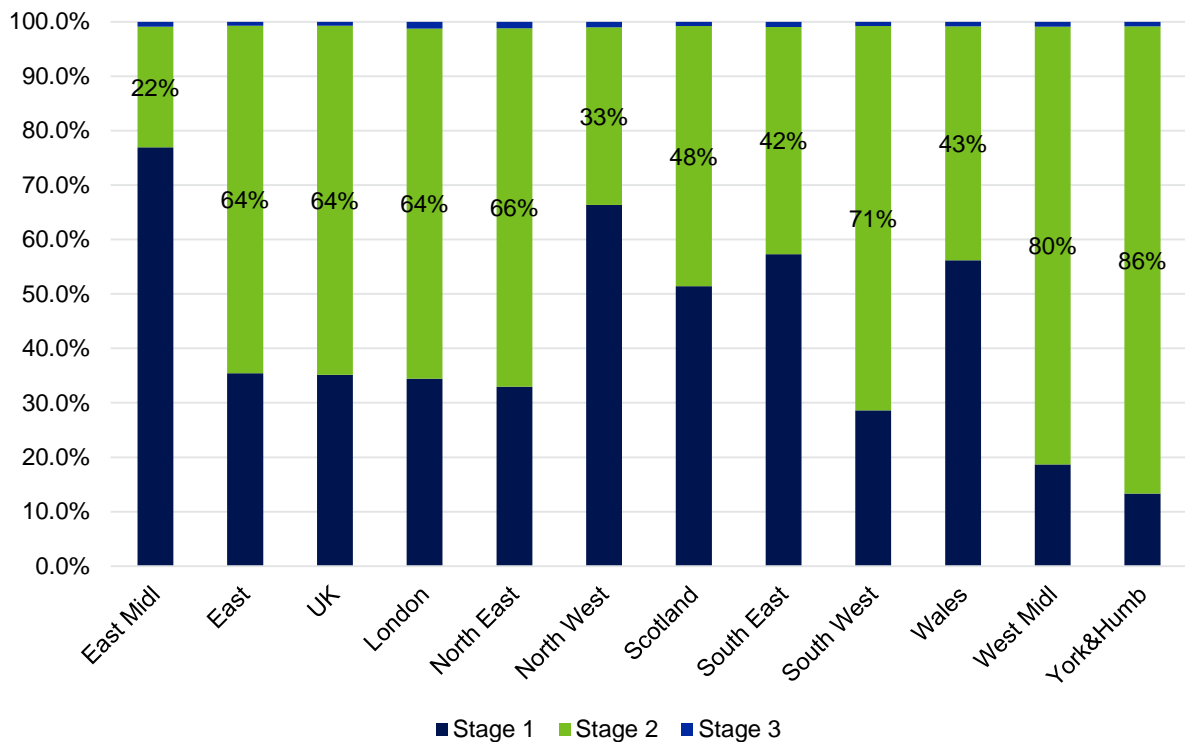
Channel



LTV at Origination



Region



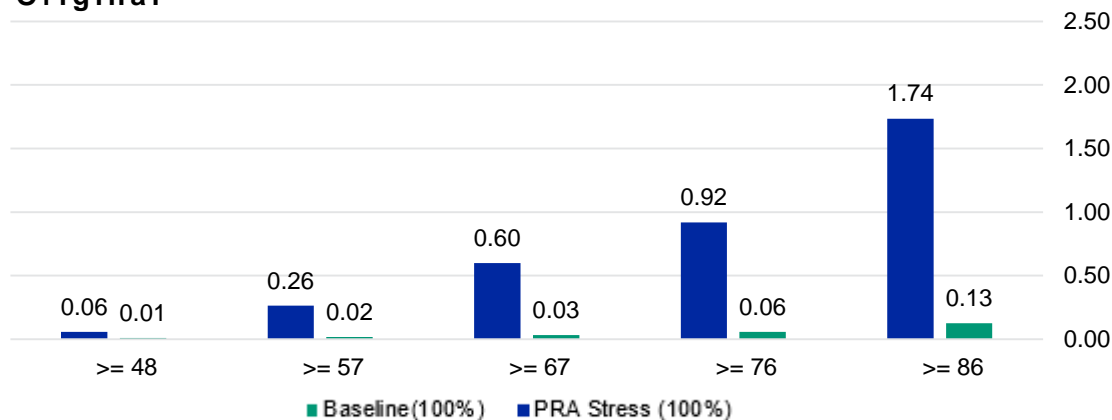
125,786 mortgages in December 2020 - 12,149 m£ outstanding balance
Original Portfolio, PRA Stress Scenario

Expected Credit Losses for December Snapshot

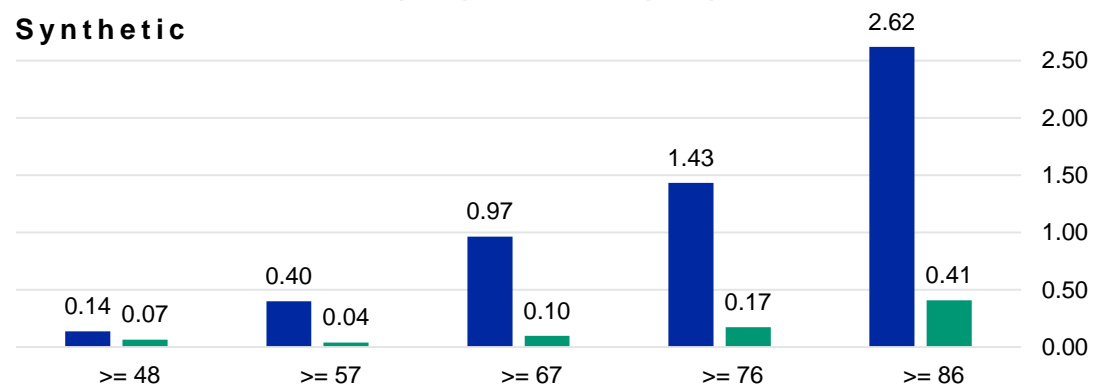
... across loan characteristics and stressed scenarios

LTV at Origination

Original



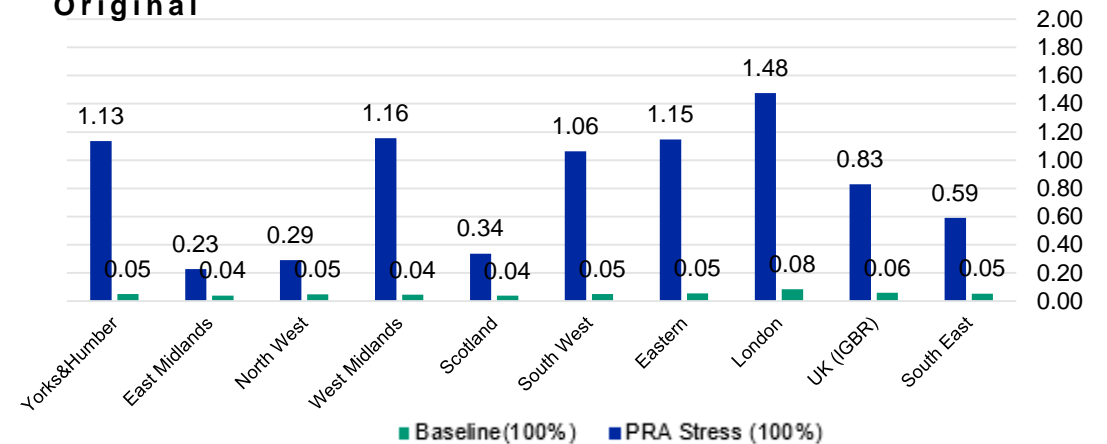
Synthetic



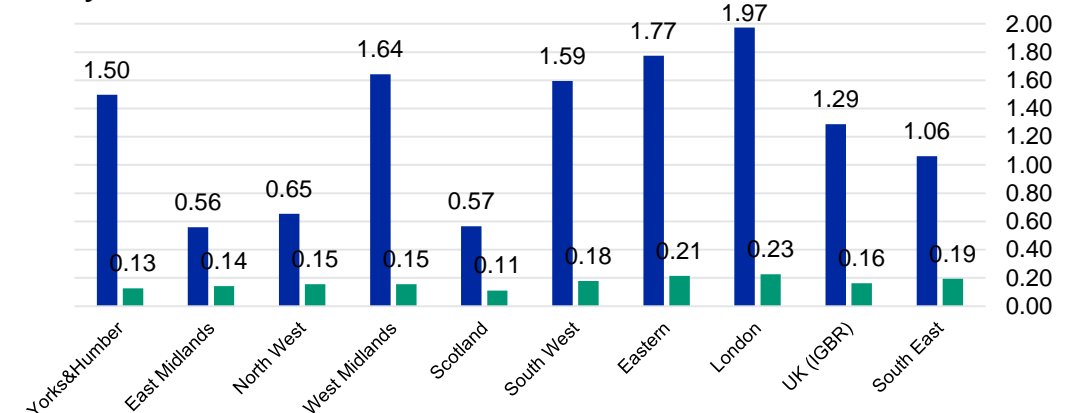
125,786 mortgages in Dec 2020, 12,149 m£ outstanding balance

Region

Original

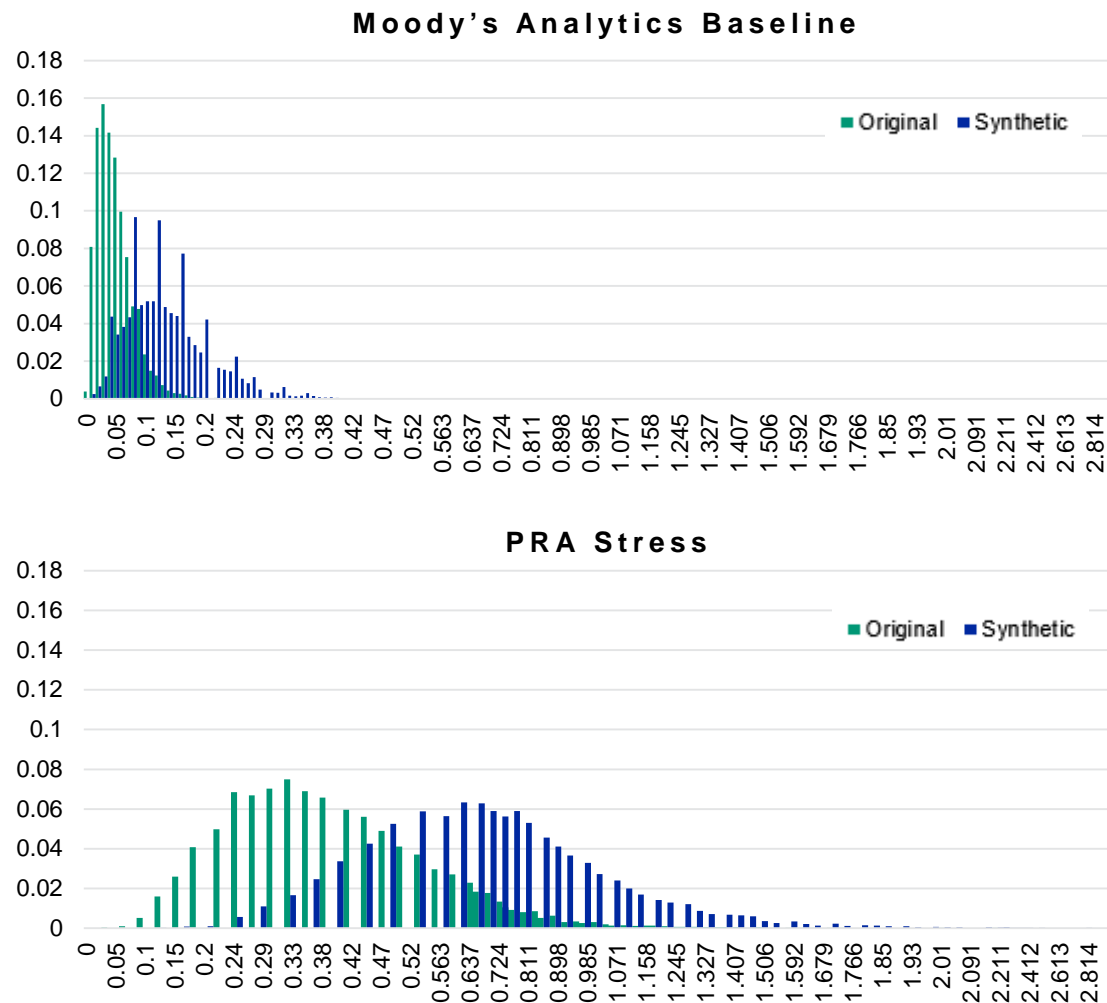


Synthetic



Loss Distribution

VaR Approach - 12-month expected loss, %



	Original Portfolio		Synthetic Portfolio	
	Moody's Baseline	PRA Stress	Moody's Baseline	PRA Stress
Expected Loss	0.045	0.420	0.132	0.777
Aggregate Statistics				
Simulations	10000	10000	10000	10000
Mean	0.045	0.420	0.132	0.777
SD	0.030	0.201	0.067	0.298
IQR	0.037	0.235	0.085	0.366
Skewness	1.316	1.512	0.964	1.155
Kurtosis	2.634	4.248	1.482	2.488
95th/50th Pct	2.574	2.089	2.080	1.816
Value-at-Risk				
50.0%	0.040	0.382	0.122	0.732
75.0%	0.060	0.514	0.169	0.931
90.0%	0.085	0.674	0.221	1.163
95.0%	0.102	0.797	0.255	1.330

Key Takeaways

1. The U.K. economy is forecast to start recovery and HPI to increase but unemployment rate is still expected to rise in 2021.
2. PRA Stress test assumed 1 in 20 type of a recession.
3. Payment holiday scheme contaminated the signal regarding default probability.
4. ECL will increase under both baseline and MA/PRA stress testing assumptions.

Q&A

Additional questions? Email us at help@economy.com

Additional Analysis, Whitepapers, Case Studies and Solution Information:
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