





PLEASE NOTE: The December 2020 results published in this report were calculated with the data available as of mid-February 2021 and these are thus based on an incomplete data set due to the reporting lag¹. Our results are also based on securitisation data, which does not fully represent lenders' assets:

- Securitised loans tend to be of better quality than non-securitised loans.
- Securitisation is not equally important in all countries and to all lenders.
- Large securitisations may disproportionately affect the overall statistics².

To view and download the Excel version of our <u>RMBS COVID-19 Tracker</u>, please click on the link.

From mid-March 2020, most European countries enacted social distancing measures to control the COVID-19 pandemic. Despite the severity of the crisis, mortgage delinquencies generally increased only moderately in Q2 2020, and receded to pre-COVID-19 levels in most markets afterwards.

In such circumstances, loan moratoria/payment holidays, are a fairer indicator of performance than arrear levels.

Given the lack of reporting homogeneity for moratoria/payment holidays, we have therefore

identified three types of loan modifications likely to indicate a payment holiday or moratorium.

We find that periodic loan modifications peaked in March/April/May 2020 and decreased over the summer. From September 2020, loan modifications were trending back towards their pre-pandemic levels.

Additionally, payment holiday observations differ widely across European countries, likely reflecting the varying severity levels of the crisis and the measures implemented to counter its effects. Loan modifications due to COVID-19

¹ See: <u>Data Timing and Timeliness Report</u>

² See: <u>Data availability report</u> for details on data availability and deal concentration by market

are, for example, lowest in the Netherlands and highest in the UK.

We also find that the kind of maturity extension observed has changed during the crisis, with most extensions concentrated in the 4 to 12-month range.

In most countries, loan amortisation patterns have not substantially changed as a result of the crisis, except in the most affected countries, such as Portugal and Italy, where principal amortisation has visibly slowed down.

Looking into borrower characteristics, we find that those with higher loan-to-value (LTV) loans are most likely to have had an extension, reflecting their higher risk.

As found in other markets, the self-employed appear to have benefitted more from loan modifications compared to civil servants and pensioners.

Please refer to our <u>COVID-19 RMBS Tracker</u> <u>Excel</u> for more details.

From mid-March 2020, most European countries enacted social distancing measures to control the COVID-19 pandemic.

Both government and public reactions led to severe economic disruption (Appendix 1 – Exhibit 12). Authorities set constraints on some economic and social activities, and people also visibly changed their behaviour even when told not to do so (for example, by stockpiling consumables such as soap, toilet paper, pasta, flour, etc). Hotels, restaurants, entertainment/leisure activities, and retailers were particularly impacted. European governments mitigated

this with a mix of extra social spending, loan guarantees, and sometimes very prescriptive laws making lenders grant payment holidays/ moratoria to borrowers who had trouble repaying their loans because of the crisis.³ Despite the severity of the crisis, mortgage delinquencies generally increased moderately in Q2 2020, and receded to pre-COVID-19 levels in most markets afterwards.⁴ (Exhibit 1)

Amount in Arrears as % of Total Outstanding - EU and UK 3.0% (By Number of Months in Arrears) 2.5% 2.0% 1.5% 1.0% 0.5% 0.0% 2019-Q1 2019-Q2 2019-Q3 2020-Q2 2020-Q3 2020-Q4 2020-Q1 ■ Two ■ Three - Six ■ Six - Twelve ■ Twelve - Eighteen ■ Eighteen +

Exhibit 1: A Moderate Increase in Mortgage Arrears is Visible in Q2 2020

³ See for instance the measures implemented in <u>Ireland</u>

⁴ Please refer to our RMBS COVID-19 Tracker for more country-level details.

In such circumstances, loan moratoria/payment holidays are a fairer indicator of performance than arrear levels. Given that "payment holidays" were not explicitly reported⁵, we looked for signs of loan modifications in the data indicating payment holidays/moratorium to calculate "implied payment holidays" instead.⁶

- When a loan benefits from a payment holiday/ moratorium, we expect to see a significant drop (at least 50%) in the instalments (field AR71).
- We expect that the borrower will be granted a longer payment term upon expiration of the payment holiday and that a maturity extension would therefore be reported for the loan. We should therefore see an increase in field AR56 (loan maturity).
- In cases of a loan becoming "interest-only," we expect the loan principal (field AR67) to stop amortising and, if instalments are not paid for a while, we expect that the accumulated interest would be capitalised and added to the amount of the loan. We thus looked for cases where: A) AR67 increases or stays the same from one period to the next; and where: B) AR67 increases from one period to the next. Case B is a special case within case A.

In order not to include loans that were possibly modified for other reasons, we flagged "implied payment holiday" due to COVID-19 the loans which:

- contained any of these three modifications since March 2020; and,
- did not contain any of these three modifications in the six periods before March 2020.

Exhibit 2 (Implied Payment Holidays - Periodic) and Exhibit 3 (Implied Payment Holidays - Cumulative) show the number of cases for the three criteria taken separately as well as their combined effect as "any of three". We performed the calculations with the two variants A and B as previously specified.

Although the results in B are clearly less than those in Exhibits 2 and 3, the combined effects seen in "any of 3 (current balance stable or increasing)" and "any of 3 (current balance increasing)" are actually very similar.

In Exhibits 4 and 5, we look at the combined effect in "any of 3 (current balance increasing)", using the increasing current balance as an indicator.

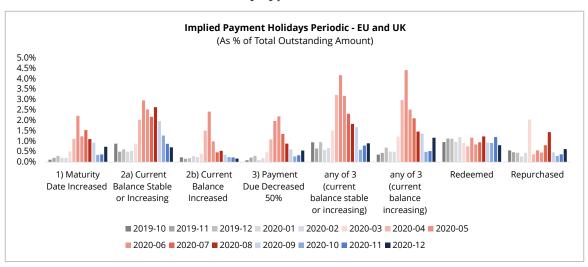


Exhibit 2: RMBS Loan Modifications by Type⁷

⁵ Please see "COVID-19 survey of payment holiday reporting practices in Europe"

⁶ Please see "Special reporting guidelines: how to report data to reflect COVID-19". We published reporting recommendations in May 2020 in order to help identify loans in payment holiday/moratorium, in our portfolios.

⁷ Due to quarterly reporting, the cumulative figure cannot simply be calculated by adding the monthly values. For each month we use the data received with an "as of" date in that month. A deal reported quarterly is therefore reflected in the statistics once every three months.

Periodic loan modifications peaked in March/April/May 2020 and decreased over the summer (Exhibits 2 and 4).

It is important to note that loan modifications were already being made in most countries prior to March 2020, although at lower levels.⁸ As of September 2020, loan modifications were trending back towards their pre-pandemic levels. The "any of 3" measures are higher than

the individual values, indicating that all three flags are not always raised for modified loans. We also see that redemptions have remained relatively stable over this period, and repurchases have not increased noticeably.

Implied Payment Holidays Cumulative - EU and UK (As % of Amount Outstanding as of February 2020) 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% 1) Maturity 2a) Current 2b) Current 3) Payment any of 3 Redeemed Date Balance (current (current Repurchased Balance Due Increased Stable or Increased Decreased balance balance Increasing 50% stable or increasing) increasing) 2020-03 ■ 2020-04 ■ 2020-05 ■ 2020-06 ■ 2020-07 ■ 2020-08 ■ 2020-09 ■ 2020-10 ■ 2020-11 ■ 2020-12

Exhibit 3: RMBS Loan Modifications by Type (Cumulative)

Source: European DataWarehouse

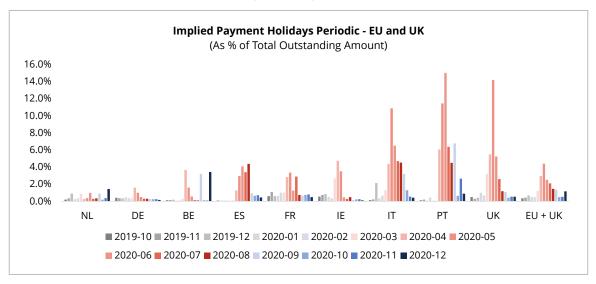
Payment holiday observations differ widely across European countries (Exhibit 4 and 5), likely reflecting the varying severity levels of the crisis and the measures implemented to counter its effects.

In hard-hit countries such as the UK, Portugal, and Italy, more prescriptive laws relating to payment holiday were enacted compared to Germany and the Netherlands, for example. These laws helped borrowers to obtain a payment holiday when their incomes decreased due to COVID-19. In the Netherlands, where social spending was boosted to make up for the effects of COVID-19, observed loan modifications are indeed lower.

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⁸ European regulation encourages lenders to apply reasonable forbearance in favour of their borrowers facing payment difficulties. In particular, the European Central Bank's (ECB) Draft Guidance to Banks on Non-Performing Loans explicitly states "The key objective of granting forbearance measures is to pave the way for non-performing borrowers to exit their non-performing status, or to prevent performing borrowers from reaching a non-performing status. Forbearance measures should always aim to return the exposure to a situation of sustainable repayment." (ECB - <u>Draft Guidance to Banks on Non-Performing Loans</u>). Also, loan modifications are typically seen as a possibility in the securitisations' documentation, but within limits. Such limits include the total share of the loans that may at some point be modified as well as the impact that such modifications may have on the total portfolio yield, maturity, or risk. For instance, no loan should have a maturity exceeding the final legal maturity of the bonds. Loans that must be modified may thus have to be repurchased by the originator to avoid keeping loans that no longer comply with the deal documentation in the securitised pool.

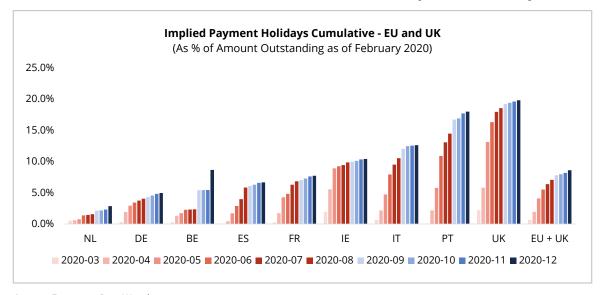
Exhibit 4: RMBS Loan Modifications by Country



Source: European DataWarehouse

We note that the criteria used for implied payment holidays are somewhat arbitrary and that different definitions would yield other results. For example, an instalment decrease of 30% would have shown higher levels of loan modifications, and in cases where the amount due had been reduced to zero, lower instances of implied payment holidays would have been found.

Exhibit 5: Cumulative RMBS Loan Modification Prevalence Depends on Country



We also observe an overall change in maturity extensions due to the crisis. Whilst most maturity extensions were either short or long term before the crisis, most modifications since March 2020 are concentrated within the 4 to 12-month range (Exhibit 6).

Maturity Extensions - EU and UK (As % of Loans With Extended Maturity - in Months) 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% one to three four to six seven to twelve more than twelve

Exhibit 6: RMBS Maturity Extension Mostly 4 to 12 Months Since March 2020

Source: European DataWarehouse

Although our portfolios contain non-negligible amounts of loans showing signs of payment holidays, the overall effect of these payment holidays appear limited so far (Exhibit 7). In the case of amortising loans that have been in our portfolios throughout the crisis, we observe almost no sign of inflexion in the amortisation for now.

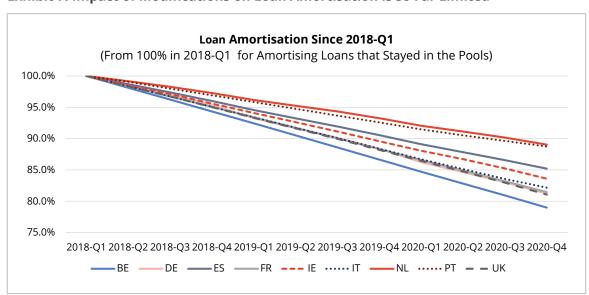


Exhibit 7: Impact of Modifications on Loan Amortisation is so Far Limited

A closer look at Exhibit 8 shows that the quarter-on-quarter principal amortisation rate has somewhat visibly decreased and not recovered in Portugal and Italy. In Ireland and the UK however, amortisation rates seem to have returned to the previous trend.

Loan Amortisation Since 2018-Q1
(Q on Q Amortisation Rate, for Amortising Loans that Stayed in the Pools)

3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
2018-Q2 2018-Q3 2018-Q4 2019-Q1 2019-Q2 2019-Q3 2019-Q4 2020-Q1 2020-Q2 2020-Q3 2020-Q4
BE ES FR IE IT PT — UK

Exhibit 8: Impact on Loan Amortisation Most Visible in Portugal and Italy

Source: European DataWarehouse; As time goes, the share of principal in an instalment increases hence the upwards trend seen in Exhibit 8.

We also investigated some of the key characteristics of loans with signs of payment holidays. Exhibit 9 shows that high Current Loan to Value (CLTV) loans are more likely to have been modified than low CLTV loans. This effect is even more visible in the UK where approximately 40% of the loans with a CLTV greater than 90% showed signs of payment holidays (Exhibit 10). This is to be expected as loan risk, and therefore the potential need for a payment holiday/ moratorium/modification, increases with the LTV.9

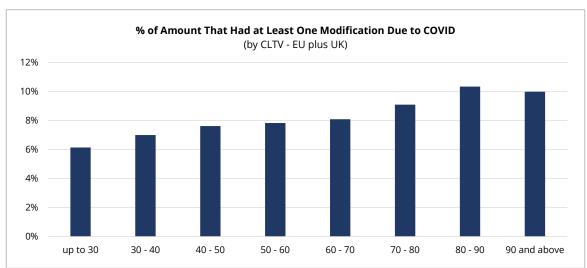
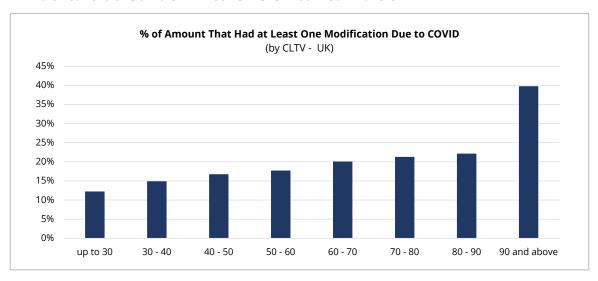


Exhibit 9: Higher CLTV Loans are More Likely to Have Been Modified

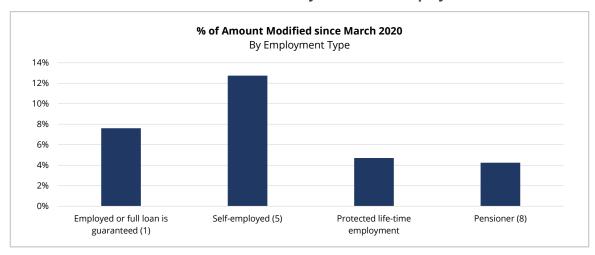
Exhibit 10: 40% of 90+% CLTV Loans were Modified in the UK



Source: European DataWarehouse

When it comes to the employment type of borrowers whose loans showed signs of payment holidays (Exhibit 11), we find this to be more prevalent for the self-employed than for civil servants or pensioners whose incomes are more stable, as also found in other asset classes.¹⁰

Exhibit 11: Loan Modifications are More Likely for the Self-Employed



Source: European DataWarehouse

As this publication goes to print (March 2021), vaccination campaigns are underway in Europe and most countries are busy containing their second and impending third waves.

Public spending and loan modifications most likely helped maintain delinquency levels at low levels for the first year of the pandemic. When Europe exits the crisis, it is likely that some of the loans that required modifications

will end up in default as support fades. Our loan modification statistics considered the first loan modification only; it is likely however, that some of the borrowers will need and obtain multiple loan modifications.

Multiple modifications, and the characteristics of the borrowers needing such modifications, will be the focus of our next research piece.

APPENDIX 1: IMPACT OF COVID-19 ON EUROPEAN COUNTRIES

The economic impact of COVID-19 (Exhibit 12) reflects, to some extent, the number of fatalities (Exhibits 13 and 14). The Netherlands and Germany, for example, were relatively less impacted than other countries on both accounts, whereas Italy and Spain are among those impacted the most. Interestingly, the economic impact of the second wave, which claimed more lives than the first, appears substantially less severe.

Year on Year GDP Growth 10.0% 5.0% 0.0% 2019-Q2 2019-Q3 2019-Q4 2020-02 2018-Q4 2019-Q1 -5.0% -10.0% -15.0% -20.0% -25.0% Italy Spain - France - Netherlands United Kingdom -Germany Belgium Portugal --- European Union

Exhibit 12: Severe Drop in GDP in Q2 2020, Followed by Recovery in Q3

Source: GDP data from Eurostat, non-inflation adjusted

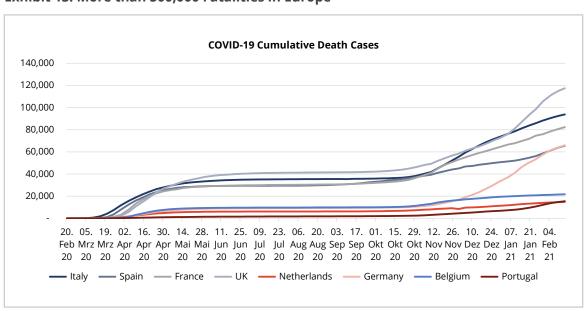
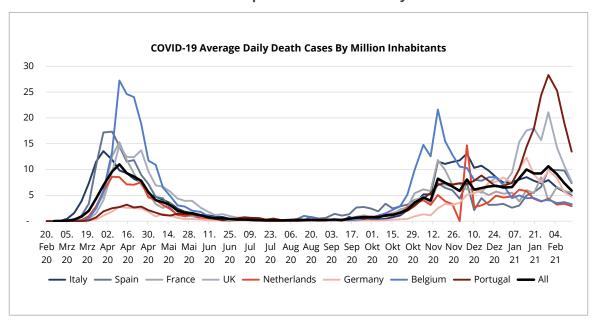


Exhibit 13: More than 500,000 Fatalities in Europe

Source: John Hopkins University; Worldometer

Exhibit 14: Not all Countries were Impacted in a Similar Way or at the Same Time



Source: John Hopkins University; Worldometer

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IMPORTANT DISCLOSURES

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