

# **MONITORING MORATORIA THROUGH COVID-19**

## **The Impact of Payment Holidays on Europe's Securitised Mortgages**

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## Monitoring Moratoria Through COVID-19 – The Impact of Payment Holidays on Europe’s Securitised Mortgages

From mid-March 2020, most European governments enacted social distancing measures to limit the spread of the COVID-19 pandemic. These measures, as well as changes in consumer behaviour,<sup>1</sup> led to severe economic disruption. Hotels, restaurants, entertainment/leisure industries, and retailers were particularly affected. Governments thus stepped in to mitigate the effects of social distancing on the economy, in many cases encouraging lenders to temporarily grant moratoria<sup>2</sup> (or payment holidays) to borrowers in an effort to prevent defaults.<sup>3</sup> In some countries, regulation even made the granting of moratoria mandatory to borrowers who faced repayment difficulties due to the crisis.

In this article, we use EDW’s loan-level database of securitised European mortgages to explore the effects of COVID-19 -related moratoria. We found that:

- Despite the severity of the crisis, delinquencies barely increased in 2020. This is most likely due to loans benefitting from moratoria that would otherwise have become delinquent.
- Moratoria levels differ widely from one country to the next. Crisis severity and conditions for obtaining moratoria partly explain these differences.
- Most first-time moratoria occurred in spring 2020, receding back to pre-crisis levels afterwards.
- Loans most likely to have obtained a moratorium also had higher credit risk prior to the crisis in terms of Current Loan to Value, Debt to Income Ratio, and Debt Service to Income Ratio.
- As per other asset classes, self-employed borrowers were more likely than pensioners and civil servants to need and obtain moratoria.
- The borrowers exposed to the most severely affected economic sectors were more likely to temporarily see their income drop, but credit risk prior to the crisis still played a key role in explaining the use of moratoria.

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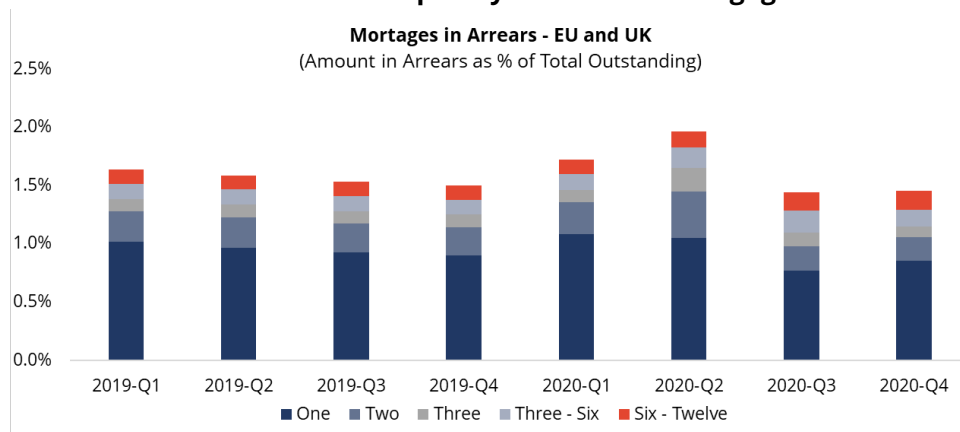
<sup>1</sup> Consumers spontaneously postponed medical appointments, stockpiled soap, toilet paper, pasta, flour, disinfectant, latex gloves... resulting in a visible supply disruption.

<sup>2</sup> By moratoria, we mean a change to a borrowers’ payment schedule temporarily reducing or fully suspending the instalments due. This typically results in loan modifications, such as increases in maturity, capitalisation of interest, or reduced instalment amounts.

<sup>3</sup> See European Banking Authority (EBA) report [“Notifications on general payment moratoria by country”](#).

Despite the severity of the COVID-19 crisis, European mortgage delinquencies increased only moderately in Q1 and Q2 2020, receding to pre-crisis levels in most countries afterwards. Exhibit 1 demonstrates that delinquencies generally returned back to pre-crisis levels in Q4 2020.<sup>4</sup> To a large extent, this apparent performance improvement is due to the immediate and substantial policy response to the crisis, as well as the widespread use of moratoria to avoid a wave of defaults.

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



Source: European DataWarehouse; weighted average delinquencies from securitisations that reported consistently to our database from 2018-Q1 to 2021-Q1;

Although delinquencies remained low, the COVID-19 crisis clearly had an impact on mortgage amortisation patterns.

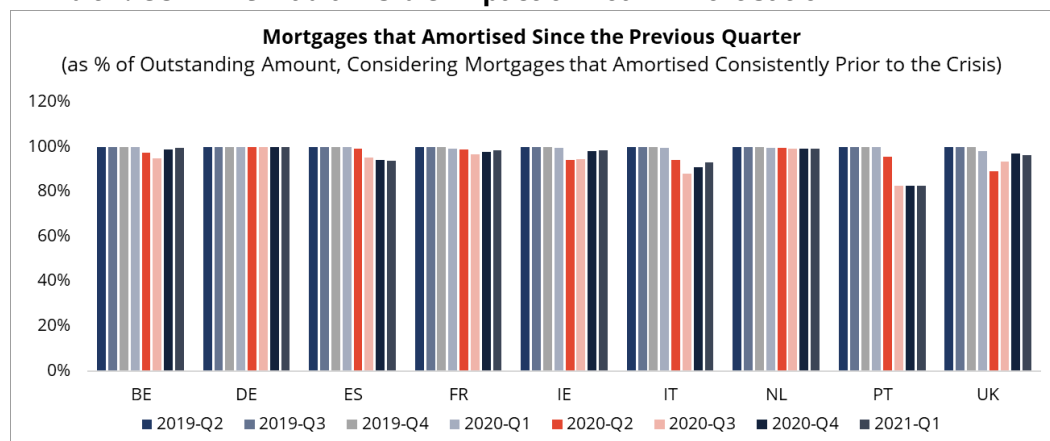
Exhibit 2 shows the proportion of loans (by amount) that amortised compared to the previous period. The chart represents only those loans that reported consistently over the last two years and had amortised regularly prior to the crisis.

In most countries we observed a dip in Q2/Q3 2020, indicating that some of these loans did not amortise in that period. The proportion of amortising loans increased again in most countries, but in Spain, Portugal, and Italy, improvements have occurred at a slower rate.

In Portugal, 83% of the loans amortised from Q3 2020 to Q1 2021, implying that 17% of these loans were still subject to moratoria at the time. In the UK and Ireland, a clear dip is visible in Q2 2020, but the loans gradually resumed amortising afterwards. Despite only 45% of the relevant data for Q2 2021 being available in EDW's database when this analysis was conducted, preliminary results suggest a slow return to amortisation in Spain and Portugal. Given that both delinquencies and moratoria played a role in explaining the dip seen in Exhibit 2, we also explored how widespread moratoria have been.

<sup>4</sup> Please refer to our regularly updated [RMBS COVID-19 TRACKER](#) for more details regarding arrears levels, and moratoria in European securitisations.

## Exhibit 2: COVID-19 Had a Visible Impact on Loan Amortisation



Source: European DataWarehouse; Based on a sample of loans that had amortised consistently from 2019-Q1 to 2021 Q1.

When a loan benefits from a moratorium, we expect to find the following changes to its amortisation characteristics in our loan-level data:

- At least a 50% drop in instalment due
- An increase in maturity
- An interruption of amortisation, with current balance stagnating or even increasing

In the case of a loan becoming “interest-only” we expect it to stop amortising, but when no interest is paid either, we expect to see the accumulated interest capitalised (i.e. added to the outstanding loan amount).

To exclude loans that were already underperforming prior to the COVID-19 crisis, we flagged as “moratorium due to COVID-19” the loans where we saw:

- Any of these three loan modifications since March 2020, and
- None of these modifications in the six periods before March 2020

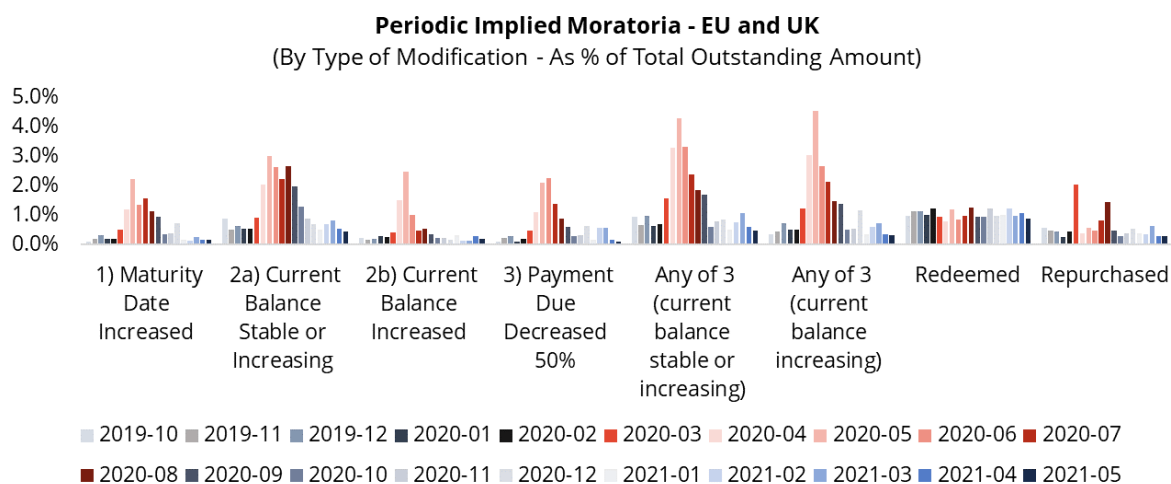
In Exhibits 3 to 5 we count the modified loans once, in the period of first modification and for their amount at that time.<sup>5</sup> In Exhibits 3a and 4a we show the occurrence of the three criteria separately as well as their combined frequency as “any of three” (i.e. implied moratoria). The two combinations are as follows:

- A) with a loan balance that remains static or increases from one period to the next
- B) with a current balance increasing from one period to the next (implying capitalisation of interest).

<sup>5</sup> We note however, that some of these loans may have been modified several times subsequently. We thus found cases of loans whose maturity had been extended several times.

Although the results in case B are clearly less than in A (2a vs 2b in Exhibit 3a and 4a), the combined effects of both options are similar. The advantage of using “current balance increasing” as a criterium, is that only loans that were sufficiently altered to bear visible consequences are flagged. This provides a clearer sign of moratorium compared to “current balance stable,” which can also occur when a loan first goes into arrears. For Exhibits 3b, 4b, 5, 7, 8, 9, 10, and 11, we therefore use the criteria “Any of 3 (current balance increasing)” as our indicator of COVID-19 moratoria.

### Exhibit 3a: First-Time Moratoria Peaked in Spring 2020 and Receded Afterwards<sup>6</sup>



Source: European DataWarehouse

Periodic first-time loan modifications peaked in spring 2020 and decreased over the summer (Exhibits 3a and 3b). While there were several waves of infections, there was only one main wave of moratoria.

We note that lower levels of loan modifications were already happening before March 2020 in most countries, as part of the normal course of business.<sup>7</sup> After a peak in new moratoria in spring/summer 2020, loan modifications trended back towards pre-pandemic levels.

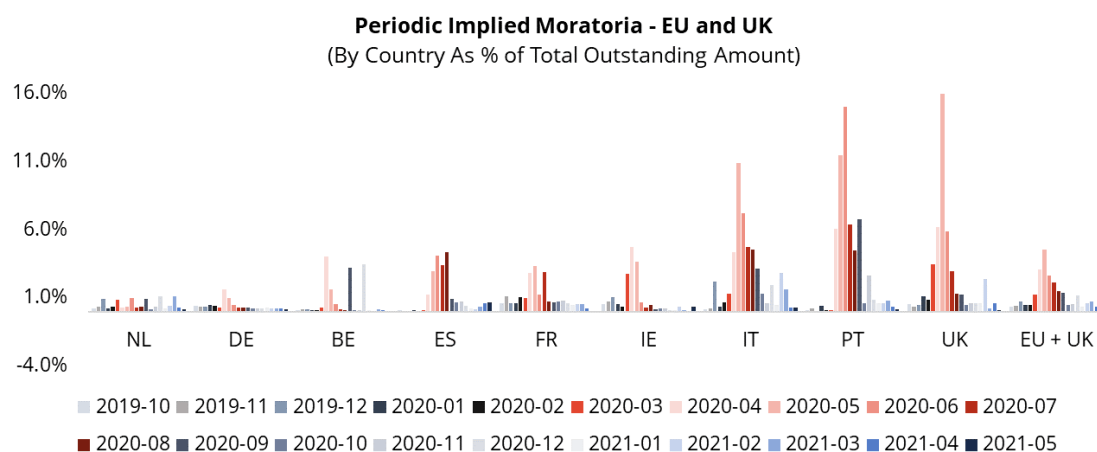
It is possible that some loans, no longer complying with securitisation documentation following modification, had to be repurchased<sup>8</sup> but loan redemption does not seem affected by the crisis and repurchases barely increased during the summer 2020.

<sup>6</sup> Please note that because the reporting is often quarterly, the cumulative moratoria cannot simply be calculated by adding the monthly values in Exhibits 3a and 3b. For each month we use the data received with an “as of” date in that month. A deal reporting quarterly is therefore reflected in the statistics once every three months.

<sup>7</sup> European regulation encourages lenders to apply reasonable forbearance in favour of their borrowers facing payment difficulties.

<sup>8</sup> In securitisations, there are typically limitations on loan modifications in terms of yield, maturity, or risk. Modified loans may thus have to be repurchased by the originator when they no longer comply with these limits. The spike of repurchases visible in

### Exhibit 3b: First-time Moratoria Occurred in Spring/summer 2020 in Most Countries



Source: European DataWarehouse; Using "Any of 3, current balance increasing" for identifying moratoria

The cumulative moratoria reported in Exhibits 4a and 4b can be compared with those mentioned in the European Banking Authority's (EBA's) report "Moratoria and public guarantees in the EU Banking Sector".<sup>9</sup> According to EBA, 7% of residential mortgages had a moratorium by June 2020. The values quoted in the EBA report for cumulative mortgage moratoria in June 2020 are at times higher than EDW's, for example in Spain and Portugal. This could be due to two main reasons:

- The use of less restrictive criteria to flag the modified loans, would highlight more moratoria, albeit at the risk of flagging loans that are actually not in moratorium.<sup>10</sup> Our methodology also excludes loans that had modifications in the periods prior to the crisis to avoid flagging loans that had performance issues prior to the crisis.
- Securitised mortgages are generally known to be of somewhat better quality than non-securitised mortgages.<sup>11</sup>

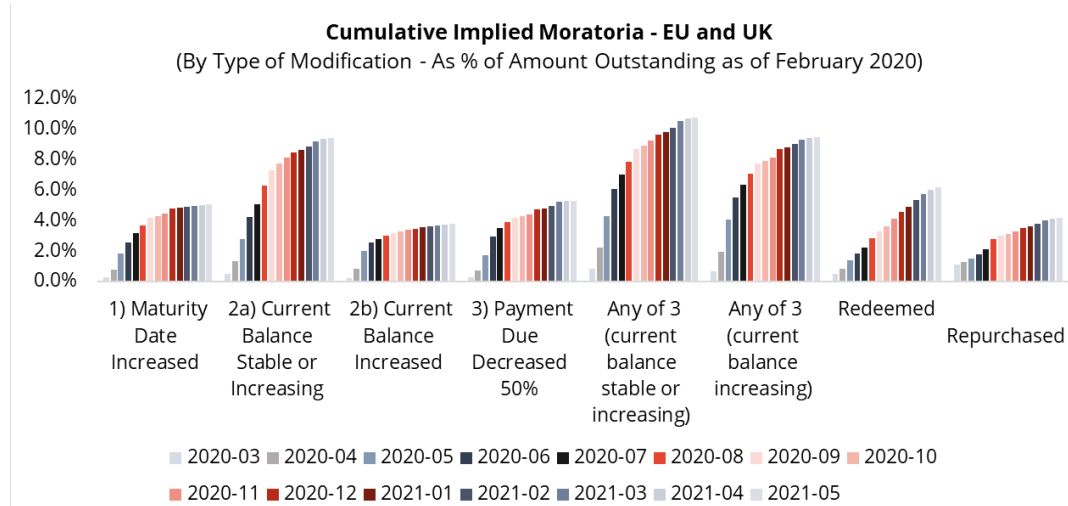
This means also that our statistics are likely to somewhat understate the true extent of the moratoria for the mortgage markets. We nevertheless expect that the trends and rank orderings observed for our securitised loans would still apply for non-securitised loans, and that our selection criteria have identified loans that were indeed modified due to COVID-19 moratoria.

<sup>9</sup> See EBA "[First evidence on the use of moratoria and public guarantees in the EU banking sector](#)".

<sup>10</sup> Please note that using different criteria to identify "implied payment holidays" would yield different results. For instance, using a decrease of 30% at least of the instalment amount, we would have found higher levels of loan modifications. Had we only looked for loans where the instalment amount had been reduced to zero, we would have found lower values instead.

<sup>11</sup> Typically, mortgages must be performing at the time they are included in a securitised portfolio and must not have been restructured for performance reasons either.

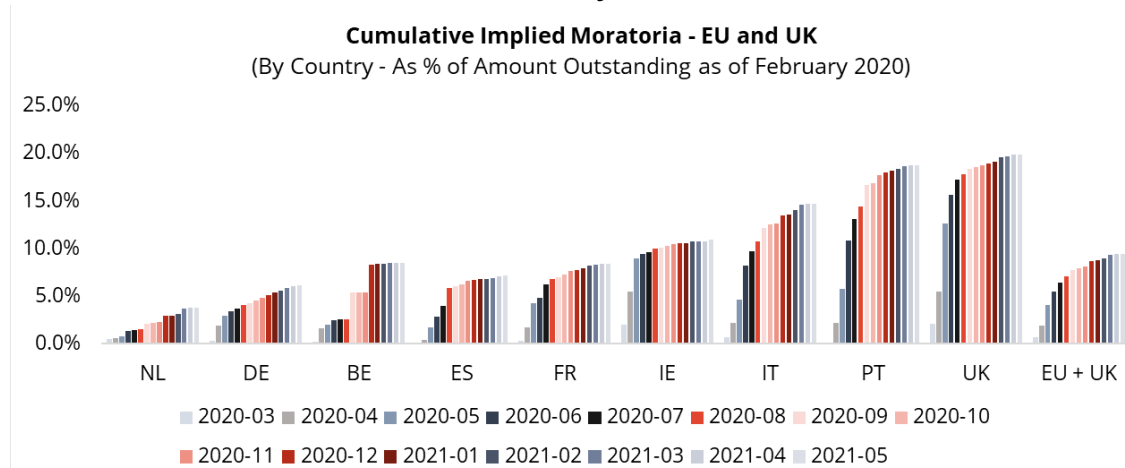
### Exhibit 4a: Implied Moratoria Using Various Loan Modifications As Indicators



Source: European DataWarehouse

Moratoria levels differ substantially across European countries, as shown in Exhibit 4b. These differences most likely mirror the severity of the crisis and the measures used to counter it. Italy and Portugal, for instance, enacted prescriptive legislation on moratoria so that borrowers facing an income reduction specifically due to COVID-19 could demand a moratorium. The Netherlands, on the other hand, did not enact legislative moratoria but used other means of mitigating the effects of the crisis.

### Exhibit 4b: Moratoria Have Been More Widely Used In some Countries Than Others



Source: European DataWarehouse

In Exhibit 5, we compare the 2020-Q1 cumulative implied payment holidays shown in Exhibit 4b, with several possible explanatory factors. We see that:

- Germany and the Netherlands had the least moratoria and were also less impacted than other countries in terms of casualties and GDP.
- In contrast, Portugal and Italy combine some of the highest figures in terms of casualties, GDP impact, and cumulative moratoria.

- The UK, with the highest cumulative moratoria and a high number of casualties, was impacted by the crisis less than other countries, such as Belgium and Italy where casualties were higher and moratoria lower.

All these factors could explain the extent of the use of moratoria, but the most crucial indicators relate to whether moratoria were offered, how easy they were to obtain, and if they were needed.

In the UK for instance, moratoria were offered as part of an industry-led initiative with governmental sponsorship. Although not a legislative moratorium, lenders were very strongly encouraged to take part, and moratoria were liberally granted with minimal verifications. We believe that this was the determinant factor in the UK.

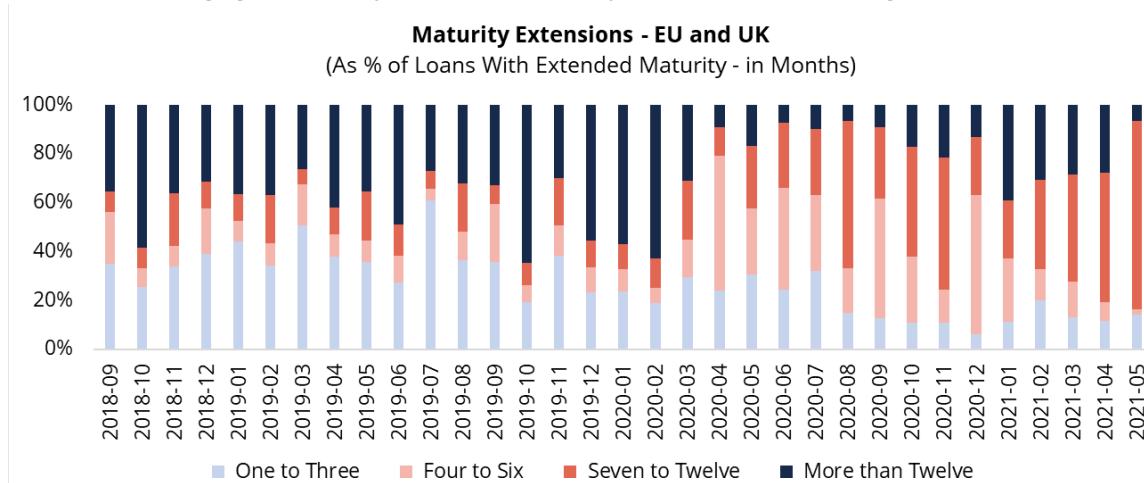
**Exhibit 5: Cumulative Moratoria and Indicators of Severity of Crisis**

	Implied Moratoria (Cumulative)	COVID-19 Deaths per 100,000 Inhabitant	GDP change 2019-Q4 to 2021-Q1	Reliance on Tourism	Legislative Moratoria for Mortgages
NL	3.7%	101.5	-1.0%	3.7%	Non-legislative
DE	5.8%	107.3	-2.3%	4.4%	Yes (limited to 3 months)
ES	6.9%	169.5	-9.0%	10.9%	Yes (non mandatory)
FR	8.4%	164.0	-1.7%	7.0%	Non-legislative
BE	8.5%	217.8	-1.7%	2.3%	Yes
IE	10.8%	99.6	7.2%	3.4%	Non-legislative
IT	14.7%	210.2	-5.2%	6.0%	Yes
PT	18.7%	165.5	-5.9%	9.2%	Yes
UK	19.7%	190.7	-2.9%	3.8%	No (public + private initiative )

Source: European DataWarehouse; Eurostat; European Centre for Disease Prevention and Control; \*World Tourism; \*\* EBA; \*\*\* ukfinance.org (public-private initiative)

The length of the first-time maturity extension changed during the crisis. Whereas most maturity extensions were either short or long term before the crisis, most maturity extensions since March 2020 are concentrated in the 4 to 12 months range as shown in Exhibit 6.

**Exhibit 6: Mortgage Maturity Extension Mostly in 4-12 Months Range Since March 2020**



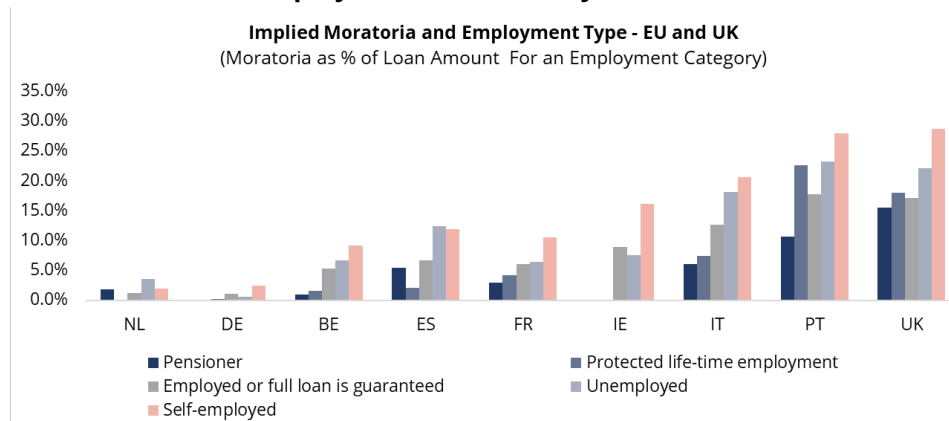
Source: European DataWarehouse

EDW data shows that some categories of borrowers were struck harder than others. When analysing the employment type of the borrowers whose loans identified as moratoria (Exhibit 7),



we observe that the self-employed relied on them more often than civil servants or pensioners whose incomes are more stable. This was also the case for other asset classes in our database,<sup>12</sup>

### Exhibit 7: The Self-Employed are More Likely to Have Benefitted From Moratoria



Source: European DataWarehouse

We then looked at the pre-crisis credit risk profile of the loans we identified as moratoria, using the following key credit-risk indicators:

- Current Loan-To-Value ratio (CLTV - The ratio of the outstanding loan amount to the current value of the property); the higher the CLTV, the greater the default risk<sup>13</sup>
- Debt-To-Income Ratio (DTI - Loan amount divided by the yearly income); a higher DTI, implies a greater credit risk
- Debt Service-To-Income ratio (DSTI - The ratio of the monthly instalment to the borrower's monthly income); a higher DSTI indicates a greater loan service burden

For these statistics, we considered the last income and instalment values provided prior to the crisis.<sup>14</sup> We find that if the borrowers exposed to the most severely affected economic sectors were more likely to temporarily see their income drop, credit risk prior to the crisis still played a role in explaining the use of moratoria.

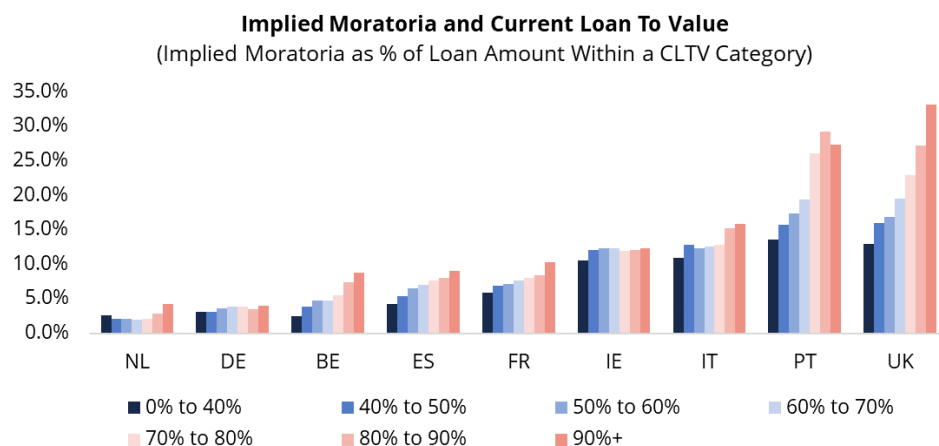
In most countries, we see that loans with a higher CLTV prior to the crisis are indeed more likely to have been in moratorium.

<sup>12</sup> See in particular [“SME and the self-employed have been the main beneficiaries of auto loans extensions”](#)

<sup>13</sup> On this topic see for instance [“The V in LTV and Why it matters”](#)

<sup>14</sup> We would indeed expect a drop in income due to the crisis to trigger a moratorium and therefore a temporary decrease of the instalment due.

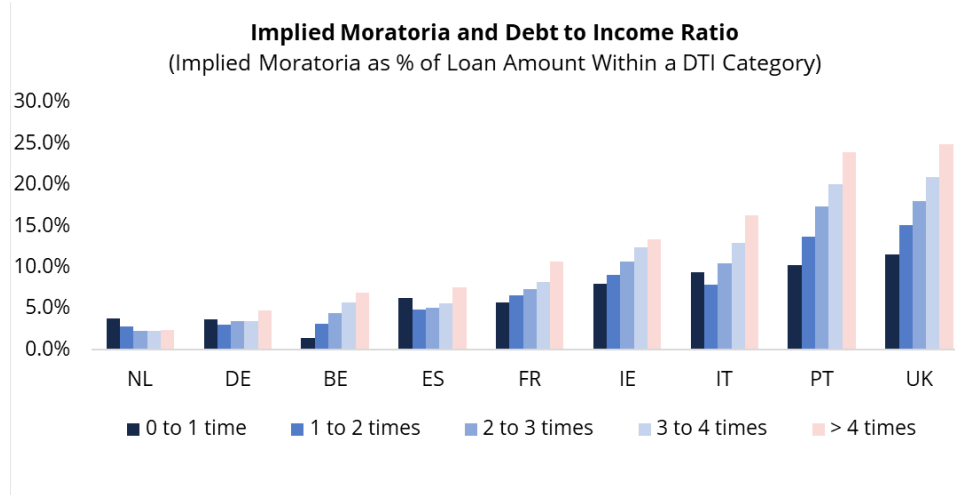
### Exhibit 8: Moratoria Are More Common For Loans With a High CLTV



Source: European DataWarehouse;

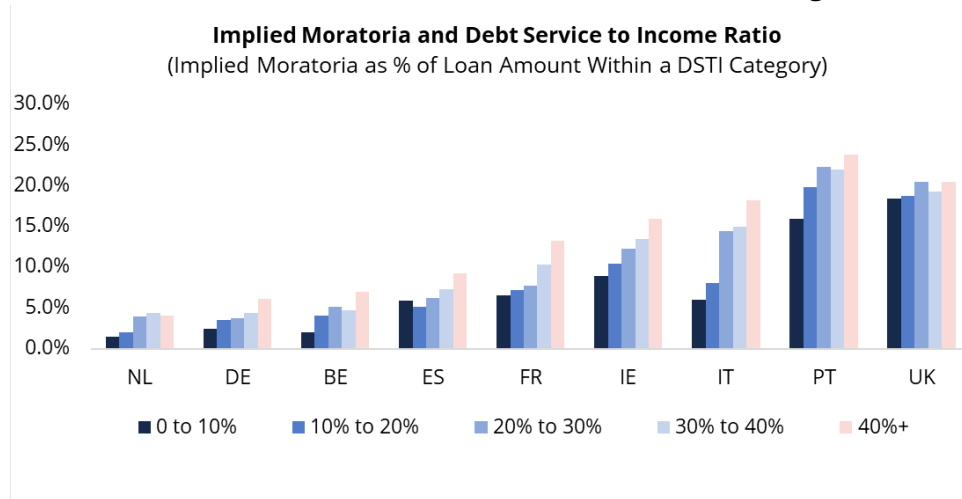
A similar observation can be made for the DTI ratio (Exhibit 9) and DSTI ratio (Exhibit 10).

### Exhibit 9: Moratoria Are More Common For Loans With a High DTI



Source: European DataWarehouse

### Exhibit 10: Moratoria Are More Common For Loans With a High DSTI



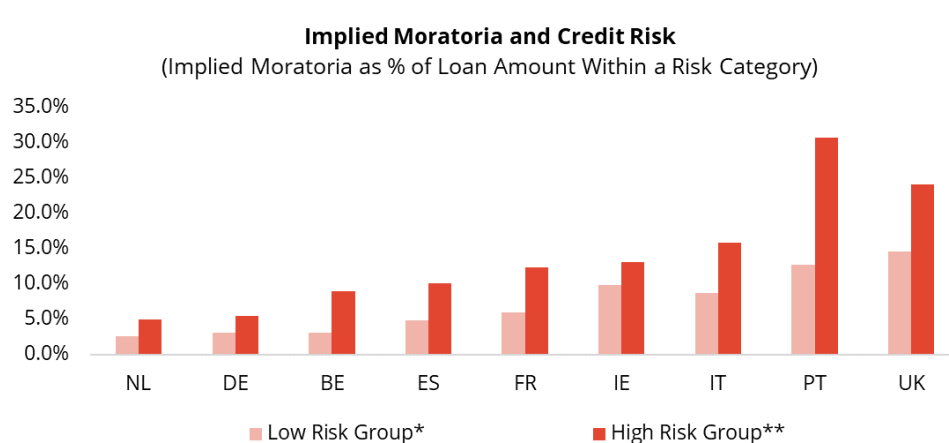
Source: European DataWarehouse

In Exhibit 11, we created two groups of loans combining all three credit risk indicators in each country.

- Low risk group: DSTI below 30%, DTI less than 3 times, and CLTV below 70%
- High risk group: DSTI exceeds 30%, DTI more than 3 times, and CLTV exceeds 70%

Indeed, Exhibit 11 shows that moratoria are less common in all countries for loans with a low credit risk than for those with a high credit risk.

### Exhibit 11: Moratoria Are More Common For Riskier Loans



Source: European DataWarehouse; \* DSTI less than 30% and DTI less than 3 times and CLTV below 70%; \*\* DSTI above 30% and DTI More than 3 times and CLTV above 70%

Moratoria thus complemented government-sponsored measures (furlough, Kurzarbeit etc...) in preserving the purchasing power of borrowers throughout the crisis. In cases where borrower incomes were not fully preserved by state support, not having to repay their loan instalment over the period was also certainly helpful.

As we saw in Exhibit 2, loans have slowly started amortising again in most countries. We expect that the phasing out of moratoria will remain flexible until the economy recovers. It is likely, however, that some of the borrowers currently benefiting from moratoria will eventually default if they cannot recover their pre-crisis incomes.

EDW will continue monitoring the effects of moratoria, particularly towards the end of 2021, when some of these special measures are likely to be lifted.

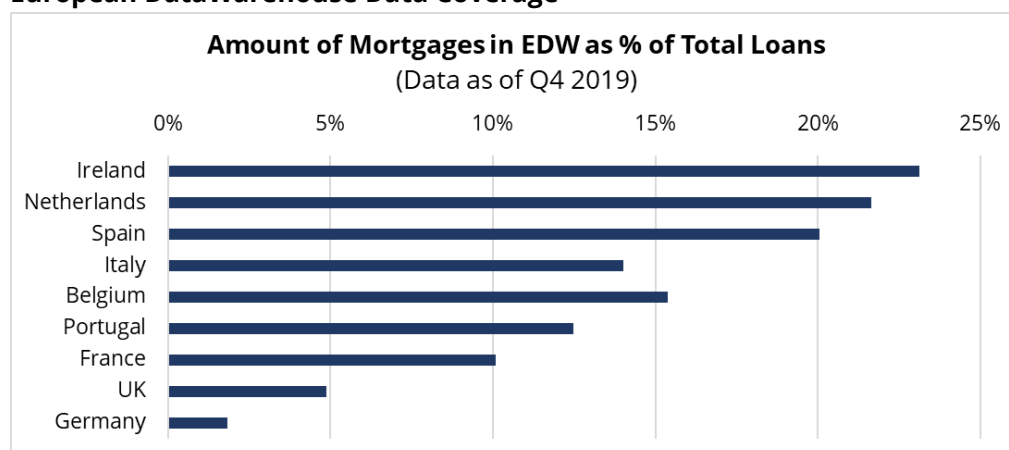
## Appendix1: Data Availability

**PLEASE NOTE:** our results are based on securitisation data, which does not necessarily 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 statistics

Please see <https://eurodw.eu/> for more details regarding our database. The data on RMBS follows the [ECB RMBS template](#). Please refer to our [Data Availability Report](#) for an overview of the data available by country and asset class. Also, for more details on the impact of COVID-19 on securitisations, please also refer to our other publications such as [RMBS COVID-19 Tracker](#). Please click on the link to download the full report.

### European DataWarehouse Data Coverage



Source: European DataWarehouse; European Mortgage Federation

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