Commentary
European NPLs 2023 Credit Outlook

DBRS Morningstar
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Summary

Barring a few exceptions, the performance of European NPL transactions issued prior to the outbreak of the Coronavirus Disease (COVID-19) deteriorated as the pandemic spread. Although the performance deterioration continued in 2021 and in 2022, it has been at a much slower pace in 2022, with a few transactions even reversing their downward trends during this period.

Conversely, transactions that closed after the pandemic started have generally displayed stronger performance compared with initial expectations since closing. As portfolio composition for these transactions has remained consistent compared with prior transactions, one of the driving factors behind the relevant difference in performance has been how servicers have adjusted their expectations. The expected timing of the judicial recovery assumptions generally increased to reflect the slower speed of legal proceedings and real estate auctions. Additionally, residential real estate values have experienced a further increase in the jurisdictions relevant for European NPL securitisations.

From the second half of 2022, uniformly, across Europe, increased borrowing costs, high inflation, and elevated energy bills are contributing to slowing economic growth and putting additional burden on households and corporates. Rising interest rates exert downward pressure on real estate values.

On the positive side, unemployment rates continue to be low since the pandemic highs and household savings have increased during the pandemic. Banks are well capitalised and further de-risked in the past couple of years, reducing the risk of a funding squeeze. Next Generation EU (NGEU) funds anticipated in Italy, Spain, and Cyprus should positively affect the respective macroeconomic performance. Court closures and the subsequent bottlenecks at courts, which led to recovery delays for NPL securitisations and to servicers switching away from judicial recovery strategies towards more amicable strategies such as debt-for-asset swaps or debt purchase options, are clearing (with the exception of Spain). In the servicer reports, DBRS Morningstar observes that the comparative decline in the percentage of judicial recoveries in periodic collections is reversing. This could positively affect future updated business plans for the DBRS Morningstar-rated transactions.

The following table further details our expectations for the year across each of the European NPL jurisdictions:

Jurisdiction	NPL 2023 Credit Outlook
Cyprus	Stable (Page 5)
Ireland	Stable (Page 7)
Italy	Negative (Page 9)
Portugal	Stable (Page 14)
Spain	Negative (Page 16)
UK	Stable (Page 18)

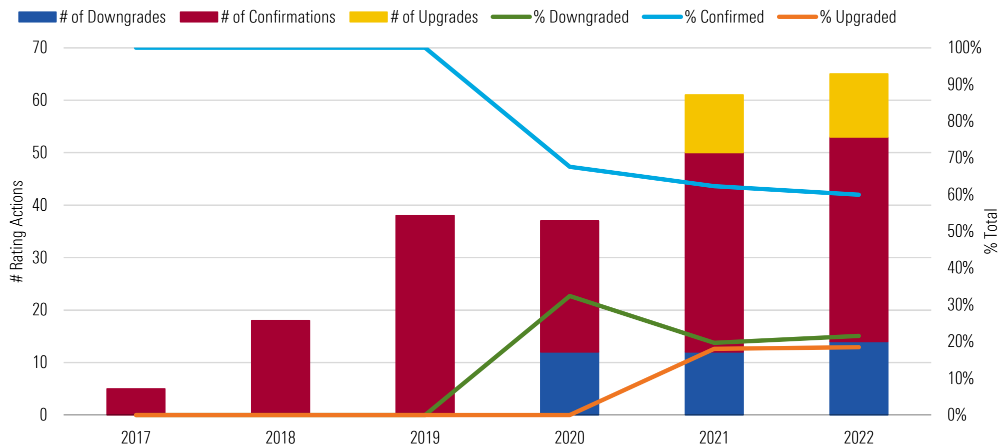
In terms of the proportion of rating actions for publicly rated European NPL securitisations, 2022 followed a similar pattern as 2021. In 2022, DBRS Morningstar confirmed 39 tranches of 24 transactions, upgraded 12 tranches of eight transactions, and downgraded 14 tranches of 10 transactions.

Of the 14 downgraded tranches, 13 relate to nine pre-pandemic and pre-GACS 2019 amendment Italian NPL securitisations, which displayed continued performance deterioration through and after the pandemic. The one remaining downgrade relates to a pre-pandemic Spanish NPL securitisation.

In March 2022, following the removal of the RMBS coronavirus-related adjustments to expected performance (https://www.dbrsmorningstar.com/research/393737/dbrs-morningstar-places-ratings-on-seven-european-npl-transactions-under-review-with-positive-implications-following-coronavirus-adjustment-updates), DBRS Morningstar placed the ratings on 10 tranches of six Italian NPL securitisations Under Review with Positive Implications (UR-Pos.). DBRS Morningstar upgraded five tranches in three of these transactions with Stable trends, and confirmed the remaining five tranches in the other three transactions and changed the trends on their rated tranches to Positive from Stable (four) and from Negative (one). Additionally, DBRS Morningstar changed the trend on four tranches of a Spanish NPL securitisation that was rated during the pandemic to Stable from Negative.

The remaining upgrades resulted from fast deleveraging of the related NPL securitisations. DBRS Morningstar upgraded its ratings on the senior bonds of two Irish NPL securitisations to the AA category after significant deleveraging as a result of sizeable portfolio sales. Faster-than-expected amortisation in a robust market supported by a long trend of significant real estate price growth led to upgrades for three Portuguese transactions.

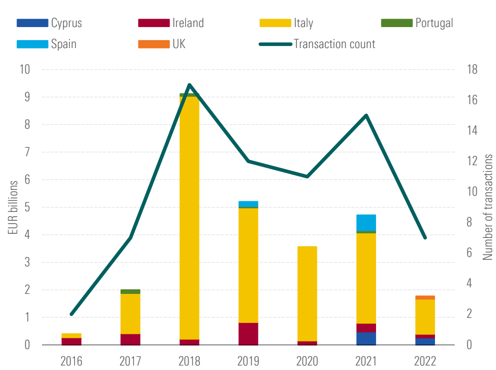
Exhibit 1 DBRS Morningstar European NPL Rating Activity



Source: DBRS Morningstar.

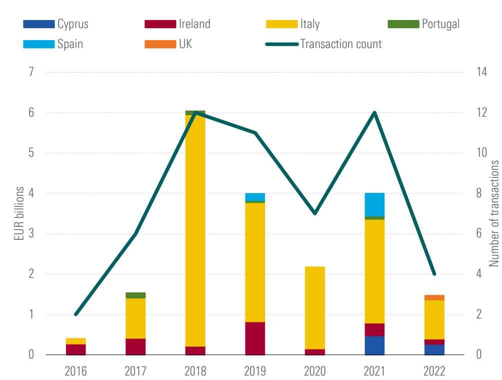
In terms of issuance volumes, in comparison with 2021, public European NPL issuance in 2022 was much lower by the rated notes amount measure (EUR 4.7 billion in 2021 versus EUR 1.8 billion in 2022), as well by number of transactions (16 in 2021 versus seven in 2022). This is largely due to the reduction in the number of Italian NPL securitisations with the expiration of the Italian Garanzia Cartolarizzazione Sofferenze (GACS) asset protection scheme in June 2022 (four Italian NPL securitisations in 2022 compared with 10 each in 2021 and 2020).

Exhibit 2 NPL Securitisations Issued; Class A (EUR billions)



Source: DBRS Morningstar, issuer reports.

Exhibit 3 NPL Securitisations Rated by DBRS Morningstar; Class A (EUR billions)



Source: DBRS Morningstar.

Expectations for 2023 issuance remain dominated by the performance of peripheral economies and, in particular, Southern European jurisdictions; however, considering the systemic scale of the problem at the European level, it is possible that we will see rated transactions in new jurisdictions and, considering the limited cost for governments compared with other solutions, the introduction of schemes similar to Italy's GACS scheme and Greece's Hellenic Asset Protection Scheme (HAPS) (which expired in October 2022) in other jurisdictions might be possible. Such transaction volumes are relatively unaffected by European securitisation market conditions, considering that senior classes are usually retained.

The consensus of market participants is that there will be a renewal of GACS in 2023, albeit with some structural changes. The discussions appear to be continuing. Initial anticipation was that there would be an announcement immediately after the September 2022 elections in Italy. However, nothing has been announced yet. If GACS is renewed, it is likely HAPS will be renewed, too – possibly also with some structural changes.

The NPL securitisations outside of government asset protection programmes, observed in jurisdictions such as the UK, Ireland, Spain, Portugal, and Cyprus are dependent on European securitisation market conditions. DBRS Morningstar expects public issuances during the course of 2023 to be broadly in line with the volumes of 2020/2021, as central banks' interest rate policies become more stable and the government asset protection programmes are renewed. The year may also see securitisations of smaller sized NPL portfolios and reperforming loan (RPL) portfolios that are sold out of existing securitisations.

Cyprus

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2023 Credit Outlook
Cypriot NPL Credit Outlook: Stable

The Cypriot economy recovered strongly from the coronavirus shock, but its small, service-driven economy was more vulnerable to external shocks. The economy could face further turbulences linked to the conflict in Ukraine (such as a reduction in Russian tourist arrivals, https://www.dbrsmorningstar.com/research/393664/cyprus-important-economic-links-with-russia-increase-risk), and inflation.

DBRS Morningstar's most recent sovereign report (https://www.dbrsmorningstar.com/research/403796/dbrs-morningstar-confirms-the-republic-of-cyprus-at-bbb-stable-trend, 7 October 2022) refers to the strong capitalisation of Cypriot banks, which provides a cushion against some weakening in asset quality and continued weak profitability, and mentions fiscal pressures that might arise from the National Health System and the planned expansion of the public asset management company, KEDIPES. In order to prevent foreclosures for vulnerable households, KEDIPES plans to acquire eligible primary residences (those with market value below EUR 250,000), which have been used as collateral in NPLs, and to let those residences to vulnerable households (IMF estimates the cost at 3.5% of GDP).

According to the Central Bank of Cyprus data, between YE2017 and Q3 2022, there was a reduction of EUR 17.8 billion in NPLs in authorised credit institutions (10.2% NPL ratio at Q3 2022 versus 46.4% at YE2016). This continues to be a large amount compared with the size of the economy and these loans are still being worked out.

A noteworthy part of the EUR 17.8 billion reduction in NPLs relates to the EUR 7.3 billion of loans in nominal value that remained in the residual entity (renamed SEDIPES) upon the banking license surrender of Cyprus Cooperative Bank and transfer of a part of its assets and liabilities to Hellenic Bank plc. SEDIPES's 100% owned subsidiary KEPIDES manages these nonperforming loans and the retained real estate portfolio and assets in partnership with Altamira Asset Management (Cyprus) with a target of recovering the EUR 3.6 billion of state aid. A Q2 2022 report shows EUR 740 million of the state aid has been paid back since then.

The two NPL securitisations rated publicly by DBRS Morningstar relate to circa EUR 3.2 billion of total exposure of loans originated by the Bank of Cyprus. Both closed recently and, as such, there is no meaningful information available yet to comment on the transactions' performance.

Pool Notes		**Structural Notes**	
Positive	**Negative**	**Positive**	**Negative**
• **Real estate type**: Most of the underlying real estate collateral of Cypriot transactions is residential. In 2021, although the total value of residential real estate transactions was down 14% compared with 2019 (pre-coronavirus), the number of transactions exceeded 2019's by 11% and 2020 by 32%. The key driver of this growth was the apartment market (especially the EUR 100,000 – EUR 300,000 segment), which reflects the shift towards lower-price properties and the strong domestic sector. • **Geographical area**: Most of the collateral is located in Nicosia and Limassol.	• **Reduced GDP growth**: According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, although the Cypriot economy recovered well from the pandemic in 2022, the forecast for 2023 has been reduced to 1.8% from 4.6%. • **NPL stock**: Cyprus decreased its NPL ratio to 11.2% in June 2022 from 46.4% in December 2016. This ratio remains far above the average NPL ratio for Euro Area economies (3.2% in March 2022). • **Energy prices and inflation**: The annual inflation in August 2022	• **Interest rate**: Outstanding transactions are protected from rising interest rates by either being hedged or fixed rate. • **Reserves**: All transactions benefit from liquidity reserves to cover senior interest (ranging from 4.50% to 5.75% of the senior notes' outstanding balances). • **Interest rates**: Funds standing in the account bank could generate some revenue if invested into authorised investments. • **Real estate owned company (ReoCo):** All transactions have local ReoCo structures that protect prices in legal auctions against opportunistic offers.	• **Potential cash leakage to subordinated notes**: If a no cash sweep event occurs, then some part of the available funds are used to repay the junior notes. This structure provides relatively less protection to senior noteholders than in other European NPL securitisations. • **Nonstandard legal structure**: The structure is based on a secured loan rather than on a true sale and includes other nonstandard features that could lead to legal risks. Unlike transactions in other jurisdictions, in Cyprus, the CyCAC owns the assets part of the portfolio and has

	These two areas are the most stable real estate markets in Cyprus. They are the two areas driving growth, in terms of transaction volume and transaction value. • **Amicable workout**: Servicers have flexibility to anticipate collections via amicable resolutions. • **Coronavirus**: Cyprus had a strong economic growth rebound from the economic effects of the pandemic. Real GDP expanded 5.5% in 2021 after contracting 5.0% in 2020. In September 2022, the Central Bank of Cyprus also reviewed its forecast for 2022 to 5.5%, up from 2.7% in the June 2022 forecast. • **NGEU funds**: Cyprus is expected to receive a substantial amount of funds from the NGEU financial instrument (EUR 0.9 billion in grants and EUR 200 million in loans) during 2021–26, including the EUR 157 million in pre-financing received in 2021. These amounts are in addition to the Multiannual Financial Framework funds of EUR 1.0 billion during 2021–27.	reached 9.6%. While Cyprus' energy mix does not rely on gas, it depends heavily on large imports of oil. • **Conflict in Ukraine**: The most visible impact on the Cypriot economy has so far been a strong decline in Russian tourist arrivals. Despite a strong rebound in non-Russian tourist arrivals, the tourism sector activity has so far not caught up to pre-pandemic levels. This also caused a downturn in the high-end residential property market. • **Interest rates**: ECB's monetary tightening might also raise asset quality risks, as a large share of domestic loans have floating interest rates. • **Portfolio type**: Portfolios are mostly a combination of secured and real estate owned (REO) with a minority of unsecured loans. There is no relevant proportion of RPLs.			employees. The CyCAC is not a bankruptcy remote entity. • **Inflation**: Some of the structural costs related to services may increase in light of inflation.

Ireland

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2023 Credit Outlook
Irish NPL Credit Outlook: Stable

The high number of successful loan restructurings and payrate increases have been the main drivers of positive performance in the Irish NPL securitisation market during the past few years. Issuers achieved rapid deleveraging through sales of RPLs. While some Irish NPL securitisation executed business plans included RPL sales, DBRS Morningstar did not give credit to anticipated RPL sales in its rating analysis as the volume of portfolio sales depends on the state of the loan trading market. When large portfolio sales do take place, the resulting deleveraging typically leads to rating upgrades on the notes. In 2022, senior notes of two Irish transactions were upgraded to the AA category post significant deleveraging resulting from sizeable portfolio sales. Nevertheless, the positive trend of RPL sales of previous years may be difficult to maintain.

Pool Notes

Positive

- **Portfolio type**: Portfolios are nearly 100% secured by residential assets, which are less risky compared with commercial assets and there is normally a portion of RPLs in the range of 15% to 25% of the portfolio balance that delivers a steady level of recoveries every month, thus providing an extra layer of liquidity to the structure.
- **Interest rates**: Most of the loans in the portfolio are linked to variable rates, so an increase in interest rates translates into higher recoveries for the performing segments, if they remain performing.
- **Workout strategy**: Servicer's focus is to transform the nonperforming loans back into performing. The recovery process in Ireland is regulated under the framework provided by the Irish Central bank with the objective of helping debtors meet their mortgage obligations (Code of Conduct on Mortgage Arrears or CCMA). Alternative resolution processes such as 'mortgage to rent' are also available.
- **Post-pandemic conditions** such as

Negative

- **Real estate type and interest rates**: Nearly all underlying real estate collateral is residential. During the two first quarters of 2022, house prices increased 12.9% and 13.2% YoY, respectively. However, in Q3 there was a 0.8% reduction. Increasing interest rates are expected to cause further downward adjustment in real estate values.
- **Reduced GDP growth**: According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, GDP growth is expected to reduce to 1.3% in 2023 from 8.8% in 2022.
- **Energy prices and inflation**: Household balance sheets will be strained by increased borrowing costs and elevated energy bills contributing to slowing economic growth. Ireland's open economy is exposed to Russia's invasion of Ukraine indirectly, via increased uncertainty, supply bottlenecks, and rising inflation.
- **Portfolio performance**: We are observing slower-than-anticipated

Structural Notes

Positive

- **Sequential amortisation**: There is no leakage of funds towards principal payments of junior notes (except for portfolio sales). Credit enhancement of senior and mezzanine notes is expected to keep increasing over time.
- **Portfolio sales**: It is market standard to have a mechanism that allows for partial or full sales of the portfolio to third parties. The sale mechanism is regulated in the legal documents via minimum price (usually 85% of the current balance of the loans) and allocation of sale proceeds different from the transaction waterfall. Normally the minimum price is allocated to the senior notes, while any upside is used towards the repayment of the mezzanine or junior notes.
- **Reserves**: Rated transactions have liquidity reserves to cover senior interest (normally in the range of 4-6%) and there are also smaller expenses reserves to cover for the recovery costs. Mezzanine and junior notes of all but one Irish transaction rated by DBRS Morningstar have dedicated non-amortising interest reserves replenished from

Negative

- **Servicer remuneration not linked to performance**: The servicer fees are mostly independent from the performance of the portfolio and the fixed component is higher compared to other European jurisdictions.
- **Mezzanine interest**: In the most recent transaction, mezzanine interest is paid ahead of senior class principal if the performance trigger (threshold at 90%) is not breached.
- **Inflation**: Some of the structural costs or fees related to services provided to the special-purpose vehicle (SPV) may increase in light of inflation.

accumulated savings, upbeat business sentiment, and a strong labour market support domestic demand.

- **Unemployment** stood at 4.4% (October 22, Eurostat) after an increase during the pandemic (peak of 7.6%). The recently published DBRS Morningstar Baseline Macroeconomic Scenarios, forecast unemployment at 4.5% for YE2022 and 4.7% for YE2023, which are still lower than the pandemic highs.

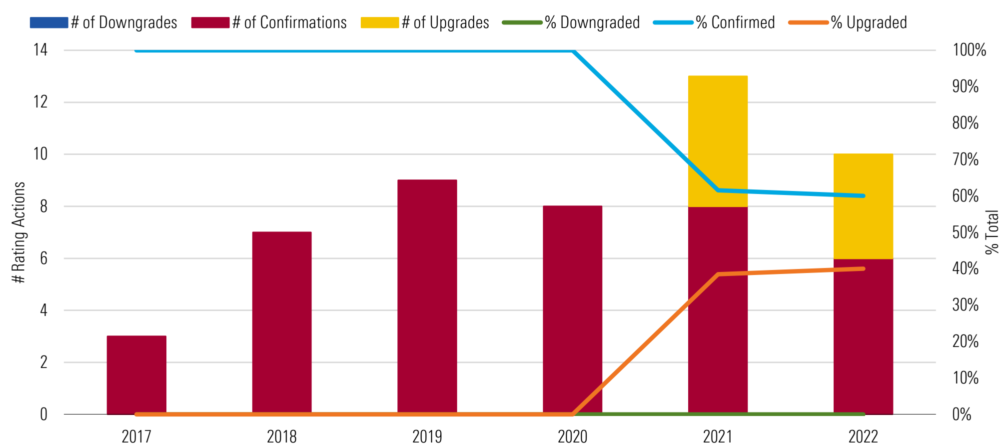
recoveries in most transactions.

- The business plans anticipate more collections deriving from collateral repossession, which later does not materialise in favour of other types of restructuring agreements with a longer duration.

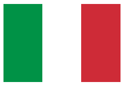
the interest rate cap payments, if available. As such, there is no cash flow leakage to mezzanine interest prior to Class A principal for these transactions.

- **Hedging**: Interest rate risk is mitigated with an interest rate cap agreement. The notional is sized equal to the rated notes balance at issuance and has a pre-determined amortisation schedule.
- **Interest rates**: Funds standing in the account bank could generate some revenue if invested into authorised investments.

Exhibit 4 DBRS Morningstar Irish NPL Rating Activity



Source: DBRS Morningstar.



Italy

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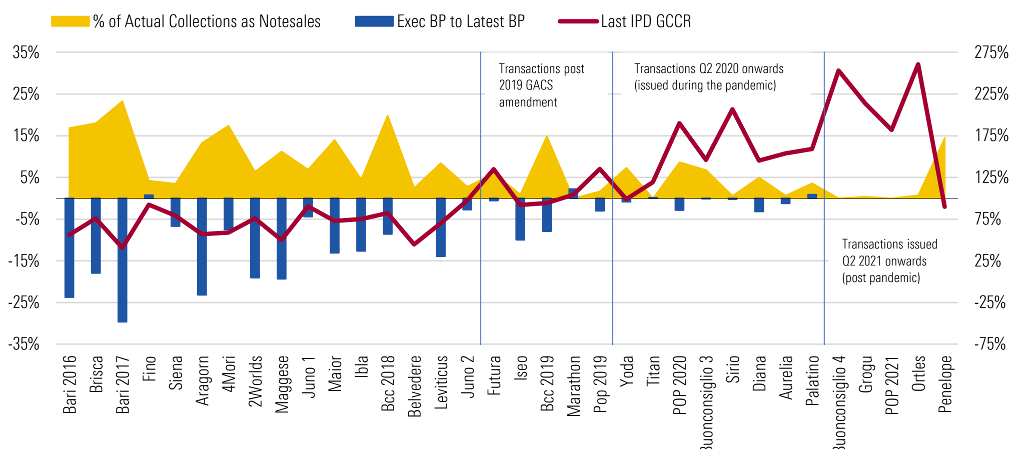
2023 Credit Outlook
Italian NPL Credit Outlook: Negative

Worldwide increasing energy prices, high inflation, and interest rates are also affecting the Italian economy. DBRS Morningstar expects the rising interest rates to put pressure on the real estate prices (and the secured recoveries from NPL securitisations).

On the other hand, as a result of the European Commission's continued focus on the reduction of nonperforming loans during the pandemic, Italian banks have stronger risk and capitalisation profiles compared to the past. Household savings and corporate deposits have also risen, creating some resilience against the headwinds that lie ahead. Unemployment is lower than at the start of the pandemic (Q3 2022: 7.9%; Q2 2020: 9.6%, Eurostat), while GDP growth expectation is positive for 2022 at 3.7% and negative for 2023 at -0.1%, according to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios. The new government signals policy continuity and a commitment to the National Recovery and Resilience Plan (NRRP).

Court closures and the subsequent bottlenecks at courts, which led to recovery delays for NPL securitisations and to servicers switching away from judicial recovery strategies towards more amicable strategies such as debt-for-asset swap or debt purchase options, are clearing. In the servicer reports, DBRS Morningstar observes that the comparative decline in percentage of judicial recoveries in periodic collections is reversing. This should positively affect future updated business plans for DBRS Morningstar-rated transactions.

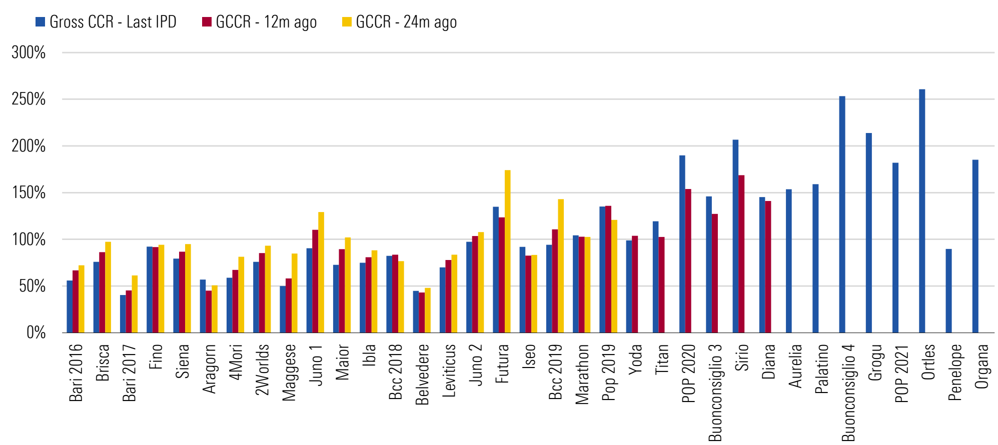
Exhibit 5 Executed Business Plan vs. Latest Business Plan (LHS) and Gross Cumulative Collection Ratio (GCCR) (RHS)



Source: DBRS Morningstar, issuer reports.

Transactions issued prior to the pandemic did not anticipate the timing delays and strategy changes caused by court closures during the pandemic in their business plans. Consequently, varying corrections were made in updated business plans of these transactions during the course of the pandemic. This also led to lower-than-anticipated collections for these transactions during this time, both in terms of amount and timing of collections. NPL securitisations issued during and after the pandemic had built the effects of the pandemic into their business plans and therefore display stronger performance compared with expectations.

Exhibit 6 Evolution of the GCCR Over the Past Two Years



Source: DBRS Morningstar, issuer reports.

On the positive side, we observe a slowdown in the securitisation performance deterioration in 2022. Exhibit 6 above shows a consistent reduction in performance during the first year of the pandemic (gross cumulative collection ratio (GCCR) 24 months ago vs. GCCR 12 months ago) whereas the more recent performance (Gross CCR – Last IPD vs. GCCR 12 months ago) is more mixed. There is a slowdown in the gross cumulative collection ratio deterioration and we can even see improvement in the performance of some of the Italian transactions.

However, for the early GACS transactions most affected by the timing delays, the increasing GACS fees over time are likely to make the effect of delays in recoveries more pronounced, which could result in further rating migration.

The Italian asset protection programme, GACS, which started in 2016 and was amended during its renewal in 2019, expired on 14 June 2022. The consensus of market participants is that there will be a renewal, albeit with some structural changes. There is no official announcement as of the date of this report.

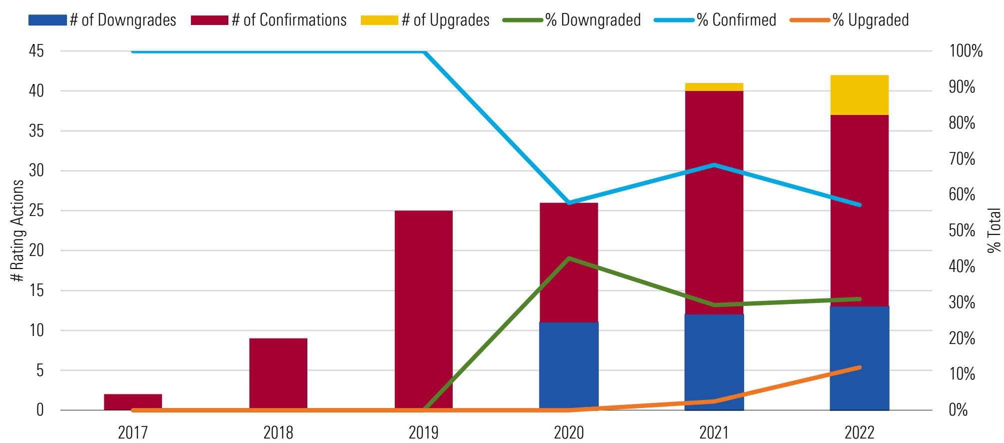
GACS played a significant role in de-risking the Italian banks. However, unlike Greece's HAPS, it only covered denounced loans and did not address the unlikely-to-pay (UTP) loans. The large stock of Italian UTPs still need to be worked out and securitisations outside of GACS could be a solution for these portfolios in 2023.

The NPL ratio for banks followed by EBA at the end of Q2 2022 stood at 2.6% while, on the Italian Central Bank website, this ratio stands at 3.5% for all Italian banks – suggesting higher NPL ratios for smaller banks. Despite data collection challenges involved with these types of transactions, 2023 could potentially bring more pooled transactions for smaller banks.

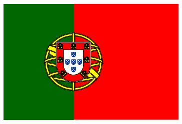
Pool Notes		Structural Notes	
Positive	**Negative**	**Positive**	**Negative**
• **Clearance of court bottlenecks**: Significant disruptions in judicial recoveries and backlog was experienced during the pandemic as a result of the restrictive measures imposed by local authorities. Clearance of court bottlenecks and a gradual return to judicial recovery should reduce/reverse the incremental weighted average life (WAL) increase in updated business plans. • **Strong capitalisation profiles for Italian banks and high household and corporate savings**: As a result of the European Commission's continued focus on the reduction of nonperforming loans during the pandemic, Italian banks have stronger risk and capitalisation profiles compared to the past. Household savings and corporate deposits have also risen, creating some resilience against the impacts of high inflation and energy costs. • **Low unemployment**: In September 2022, according to EUROSTAT, unemployment stood at 7.9% (compared with 9.6% at the end of Q2 2020). The recently published DBRS Morningstar Baseline Macroeconomic Scenarios, forecast unemployment at 8.1% for YE2022 and 8.5% for YE2023, which are still lower than the pandemic highs. • **Consistent policy**: Following the September 2022 elections, the new government signals continued support for the policies that will allow the	• **Effect of rising interest rates on real estate values**: On average 52% of the gross book value (GBV) of the collateral backing each NPL securitisation rated by DBRS Morningstar is senior secured. 44% of the real estate security value comprises residential assets and the remainder comprises commercial real estate, including land. Increased interest rates are expected to cause a downward adjustment in real estate values, with relatively higher adjustments anticipated for the commercial real estate compared to residential. This would lead to reduced recovery from real estate sales for the NPL portfolios. • **The consequences of the pandemic and of the conflict in Ukraine**: Despite the savings buffer, household and corporate balance sheets will be strained by increased borrowing costs and elevated energy bills. Gradually, some credit deterioration is anticipated for the NPL securitisations. • **Reduced GDP Growth expectations**: While sharply revised down for the effects of the conflict in Ukraine, inflation, and rising interest rates, the expectation for 2022 is still positive, but slightly negative for 2023. According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, DBRS Morningstar's expectation is 3.7% for YE2022 and -0.1% for YE2023.	• **Sequential amortisation**: Junior classes start to amortise after the full payment of the senior notes, leading to increased credit enhancement for the senior notes over time. • **Mezzanine interest subordination trigger**: In all but one Italian transaction, unless a specified trigger is breached, mezzanine interest is paid senior to the Class A principal – which in itself is a negative. For transactions issued post the 2019 GACS amendment, the mezzanine interest subordination trigger is based on a cumulative collection ratio (CCR) of 90%, which leads to early intervention to preserve the excess cash for the amortisation of the Class A notes (as observed in the case of the ISEO transaction during the pandemic) • **Servicer fee subordination**: In case of transaction underperformance (measured against the initial business plan recovery expectations), some of the servicer fees are deferred and paid junior to the senior notes. For transactions issued post the 2019 GACS amendment, the subordination trigger is based on the CCR, which engages quicker compared to the NPV PR. • **Reserves**: Rated transactions benefit from liquidity reserves sized at 3.0-7.5% of the Class A bond balance, which cover senior costs and interest in case of cash flow	• **Underhedging**: Slower-than-anticipated note amortisation caused by transaction underperformance could lead to underhedging in cap agreements with fixed notional schedules. In the current rising interest environment this would put extra stress on the transactions. • **Inflation**: Some of the structural costs related to services may increase in light of inflation. • **Transactions issued prior to the 2019 GACS amendment** include varying triggers for the mezzanine interest subordination (as low as 50% CCR trigger for one transaction) and servicer fee subordination (mostly based on the net present value profitability ratio calculated on closed accounts). These triggers take longer to engage, leading to cash flow leakage during underperformance. Further, servicers can resolve cases where they expected resolution far in the future at very low recoveries now with positive NPV effect, negatively affecting nominal recoveries. • **Increasing GACS fees** DBRS Morningstar notes that in Italian transactions that it rates, the GACS fee increases over time, making the effect of delays in recoveries even more pronounced

	release of NGEU resources to Italy and commitment to the NRRP.	• **Corporate exposures**: DBRS Morningstar anticipates credit deterioration to be more pronounced for the corporate exposures than consumer exposures. While the collateral backing each NPL securitisation is unique in terms of security, geographical concentration, and borrower type, on average, 79.6% of the GBV of NPL securitisations rated by DBRS Morningstar comprises corporate exposures.	shortfalls. There are also smaller expense reserves for recovery expenses. • **Hedging**: Interest rate risk is mitigated with an interest rate cap agreement or with an interest rate cap spread agreement (buy a cap at a low rate and sell a cap at a higher rate) with a notional equal to the rated notes balance at issuance and with a pre-determined amortisation schedule. • **Interest rates**: Funds standing in the account bank could generate some revenue if invested into authorised investments. The increasing interest rate environment would positively affect the related interest income. • **ReoCo/LeaseCo structures**: In the last three years, more transactions have been amended to include ReoCo and LeaseCo structures. In theory, these structures reduce the number of property auctions and allow improved value recovery from the real estate collateral. • Some **note sales** (varying between 0% and 23% of total collections to date) are observed in the Italian NPL securitisations. Priced above the target price in line with transaction documents, note sales speed up recoveries and allow the structures to meet target net cumulative collection (CCR) and net present value profitability ratios (NPV PR levels).

Exhibit 7 DBRS Morningstar Italian NPL Rating Activity



Source: DBRS Morningstar.



Portugal

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2023 Credit Outlook
Portuguese NPL Credit Outlook: Stable

Portuguese transactions displayed a strong rating performance, with DBRS Morningstar upgrading three of these in 2022. Following a long trend of strong price growth, residential real estate prices increased 13.2% in the second quarter of 2022 compared with a year earlier; however, there is uncertainty around the sustainability of house price levels in the coming year given the rising interest rates. Low unemployment levels and NPL securitisations' quick deleveraging gives the Portuguese transactions a robust foundation to withstand an economic slowdown.

Pool Notes

Positive

- **Real Estate type**: Most of the underlying real estate collateral is residential. During the second quarter of 2022, house prices increased 13.2% YoY (Eurostat).
- **Amicable workout**: Servicers have flexibility to anticipate collections via amicable resolutions.
- **Post-coronavirus pandemic**: Solid employment growth, pent up domestic demand, and a gradual return of tourism fuelled the strong 2021 recovery, which spilled into 2022. Momentum has since slowed.
- **Unemployment**: Unemployment reduced in 2022 after an increase amidst the pandemic (6.1% in October 2022 versus 8.2% in August 2022, Eurostat). The recently published DBRS Morningstar Baseline Macroeconomic Scenarios forecast unemployment at 6.0% for YE2022 and 6.2% for YE2023, which are still lower than the pandemic highs.
- **Upside risk to the GDP forecast** is linked to faster-than-expected recovery of tourism and effective absorption of EU funds, set to total EUR 64 billion (roughly 30% of 2020 GDP) over the next decade.
- **Portfolio performance** (against the servicer

Negative

- **Reduced GDP growth**: According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, GDP growth is expected to drastically drop to 0.5% in 2023 from 6.3% in 2022.
- **Real estate and interest rates**: The vast majority of mortgages in Portugal are at variable rates, so a rapid rise in interest rates could put further stress on borrowers. In addition, higher interest rates could put pressure on real estate values.
- **Energy prices and inflation**: Household and corporate balance sheets will be strained by increased borrowing costs and elevated energy bills, contributing to slowing economic growth.
- **Debtor type**: Most of the portfolio's outstanding balance is held by corporate loans. However, in terms of the number of borrowers, the majority of loans are held by individuals.
- **Portfolio type**: Portfolios are mostly 50/50 split by secured and unsecured nonperforming loans. There is no relevant proportion of RPLs or REO. Unsecured loans are more exposed to changes in GDP and unemployment while secured loan recoveries are exposed to the effects of

Structural Notes

Positive

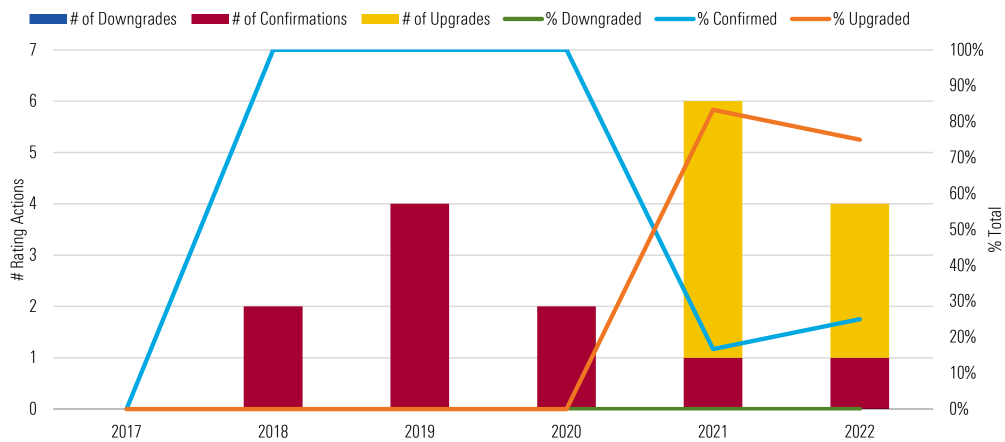
- **Sequential amortisation**: There is no leakage of funds towards principal payments of junior notes. Credit enhancement of senior and mezzanine notes is expected to increase over time.
- **Servicer alignment of interest**: In case of transaction underperformance (measured against the initial business plan recovery expectations), some of the servicer fees are deferred and paid junior to the senior notes.
- **Reserves**: Rated transactions have liquidity reserves to cover senior interest (normally at 3%) and there are also smaller expense reserves for the recovery costs.
- **Hedging**: Interest rate risk is mitigated with an interest rate cap agreement. The notional is sized equal to the rated notes balance at issuance and has a pre-determined amortisation schedule. The past good performance of Portuguese transactions reduces the risk of under-hedging.
- **Interest rates**: Funds standing in the account bank could generate some revenue if invested into authorised investments.
- **ReoCo**: Most servicers have local ReoCo structures that protect

Negative

- **Mezzanine interest** is paid ahead of senior class principal if the performance triggers (threshold at 90%) are not breached. Usual mezzanine coupons are floating based on Euribor plus a 6% margin, so despite the small mezzanine balance (15% to 30% of the senior note balance), the leakage result in a sizeable payment on each payment date.
- **Inflation**: Some of the structural costs or fees related to services provided to the SPV may increase in light of inflation.

	business plan) exceeded so far initial expectations in most of the segments except for one transaction.	rising interest rates on property prices.	prices in legal auctions against opportunistic offers.

Exhibit 8 DBRS Morningstar Portuguese NPL Rating Activity



Source: DBRS Morningstar.

Spain

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2023 Credit Outlook
Spanish NPL Credit Outlook: Negative

NPL securitisations face strong headwinds in the Spanish market. The Spanish economy has not yet reached the pre-pandemic levels and inflation is expected to take a toll on the economy. Along the same lines, courts are still slower processing foreclosures than prior to the pandemic and, therefore, collections may be delayed compared to the servicer's initial expectations for the pre-pandemic transactions. On the plus side, in the short term, recent increases in real estate prices may positively affect profitability.

Pool Notes

Positive

- **Real estate type**: Most of underlying real estate collateral is residential. During the two first quarters of 2022, house prices increased 8.5% YoY.
- **Legal status**: Most of the loans are already undergoing a judicial procedure so volatility around recovery timings is more limited.
- **Amicable workout**: Servicers have flexibility to anticipate collections via amicable resolutions.
- **NGEU funds**: Positive effects on potential growth and economic resiliency from the NGEU programme.

Negative

- **Lower GDP growth and higher unemployment**: In 2022, unemployment reduced to levels last seen in 2008 of 12.7% (Eurostat), after an increase amidst the pandemic. According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, unemployment is expected to increase to 13.2% in 2023 from 12.9% in 2022 (highest among our rated sovereigns). On the same lines, GDP growth is expected to drop in 2023 to 0.9% from the current 2022 expectation of 4.6%.
- **Interest rates, energy prices, and inflation**: Wages and salaries started growing again post-pandemic, but this will only partially offset inflationary pressures. Household and corporate balance sheets will be strained by increased borrowing costs and elevated energy bills, contributing to slowing economic growth.
- **Portfolio type**: Portfolios are mostly a combination of secured and REO with a minority of unsecured loans. Rising interest rates are anticipated to put downward pressure on real estate prices.
- **Debtor type**: While in terms of the number of borrowers, the majority of loans are held by individuals, most of the portfolio outstanding

Structural Notes

Positive

- **Mezzanine interest subordination**: In most transactions, mezzanine interest is fully subordinated to the repayment of senior note principal. As a result, compared to Italian transactions where mezzanine interest is senior to note principal as long as certain targets are met, more of the cash flow is directed towards the senior note principal amortisation.
- **Sequential amortisation**: There is no leakage of funds towards principal payments of junior notes. Credit enhancement of senior and mezzanine notes is expected to increase over time.
- **Servicer alignment of interest**: In case of transaction underperformance (measured against the initial business plan recovery expectations), some of the servicer fees are deferred and paid junior to the senior note principal.
- **Reserves**: Rated transactions have liquidity reserves to cover senior interest (ranging from 4.5% to 5.0%) and there are also smaller expense reserves to cover for the SPV and the ReoCo's recovery expenses.
- **Hedging**: Interest rate risk is mitigated with an interest rate cap

Negative

- **Underhedging**: Slower-than-anticipated note amortisation caused by transaction underperformance could lead to underhedging in cap agreements with fixed notional schedules. In the current rising interest rate environment this would put extra stress on the transactions.
- **Inflation**: Some of the structural costs related to services may increase in light of inflation.

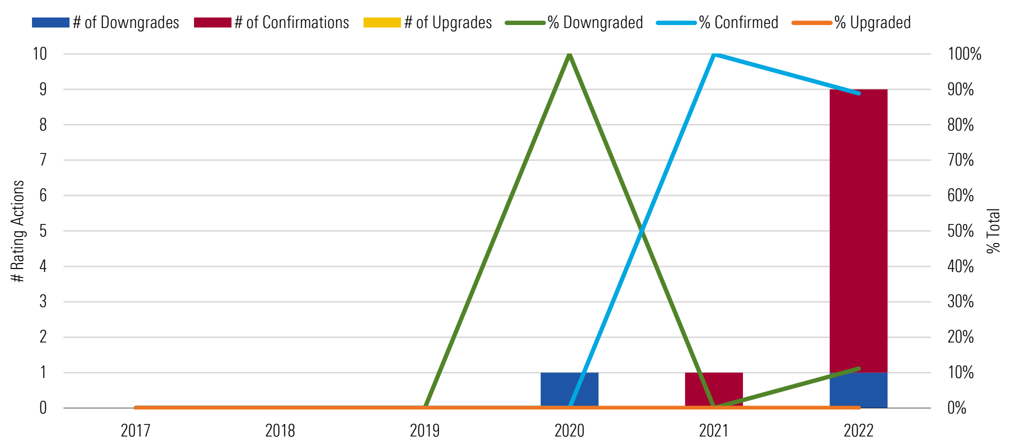
balance comprises corporate loans.

- **Default vintage and LTV**: Securitised NPLs mostly comprise aged debt defaulted as a consequence of the global financial crisis, so loan-to-values (LTV) are high (200%+ on average).
- **Repossession timing close to historical highs**: According to the Spanish General Judicial Council, the average timing of repossession processes peaked in 2020 at 39.9 months. Since then, the improvement has been minimal as in 2021, the average was 39.6 months.
- **Bankruptcies**: Since the coronavirus outbreak, corporate bankruptcies remained low so there could be an uptick now that most of the support measures have come to an end. Individuals' insolvency processes are on an upward trend reaching all-time highs every year. DBRS Morningstar expects this trend to continue.

agreement. The notional is sized equal to the rated note balance at issuance and has a pre-determined amortisation schedule.

- **Interest rates**: Funds standing in the account bank could generate some revenue if invested into authorised investments.
- **ReoCo**: All transactions have local ReoCo structures that protect prices in legal auctions against opportunistic offers.

Exhibit 9 DBRS Morningstar Spanish NPL Rating Activity



Source: DBRS Morningstar.

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2023 Credit Outlook
UK NPL Credit Outlook: ○ Stable

Prior to the market reaction to the mini budget announced by the-then prime minister Liz Truss on 23 September 2022, the UK's fiscal position was improving. Its recovery from the pandemic was faster than expected. House price growth has been strong in recent years and prices have reached high levels. Unemployment of 3.8% as of November 2022 is close to the historic low of 3.5% (July 2022) following a high of 5.1% at the height of the pandemic. According to a recent DBRS Morningstar FIG commentary, *UK Banks 9M: Solid Results Reflect Strong NII Growth; But Negative Outlook Impact Provisions*, despite a worsening economic environment, the largest UK banks rated by DBRS Morningstar (Lloyds Banking Group Plc, NatWest Group plc, HSBC Holdings plc, and Barclays plc) are well capitalised and Stage 3 loan ratio stands at 1.8% (down from 2.0% at end-FY20).

However, there is increased pressure on consumers and businesses from energy price increases (electricity prices in the UK rose by 65.4% and gas prices by 128.9% in the year to November 2022, despite the introduction of the government's Energy Price Guarantee), high inflation (the UK's Office for National Statistics shows 12-month inflation rate to November 2022 at 9.3%), rapid increase in interest rates (the Bank of England's key bank rate increased to 3.5% in December 2022 from 0.25% at the start of the year, with the incremental increase intensifying post September) and the upcoming extra taxes from the new budget. The average mortgage rate, which was 2.66% at the start of the year, peaked in October at 6.51% and has since then reduced to 5.63%. The Bank of England (BoE) warns that half of the homeowners in the UK (i.e., about four million people) will be hit by higher costs next year as their fixed-rate deals expire.

After rebounding 7.5% in 2021, UK real GDP growth is now forecast to slow significantly to 4.3% in 2022 and to -1.0% in 2023, according to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios. With business activity contracting for the fifth straight month, the UK may enter a prolonged recession.

In April 2022, DBRS Morningstar publicly rated the senior notes of a securitisation collateralised by a pool of UK reperforming unsecured receivables. The receivables contain a wide range of product types (catalogue credit, credit cards, personal unsecured loans, and telecommunications service agreements) acquired over time. While the transaction entails a 10-year business plan, the expected life of the senior notes is relatively short. After five monthly interest payment dates, the senior notes have already amortised by 39%. Despite the difficult economic climate, the transaction is performing above the business plan expectations. Therefore, despite the economic climate, our credit outlook for rated NPL transactions in the UK is stable.

Pool Notes		Structural Notes	
Positive	Negative	Positive	Negative
• **Affordability**: Low monthly borrower payments in the collateral pool are sized with affordability in mind. • **Diversity**: The pool comprises circa 357,000 borrower accounts ranging in size between GBP 50 and GBP 33,500. • **Selection criteria**: The subject pool collateralising the securitisation is a better-performing subsection of the total receivables book. • **Low unemployment rates**: Despite the declining economic climate, the unemployment rate is low at 3.8%. The recently published DBRS	• **Recession: the UK might enter a prolonged recession**. After rebounding 7.5% in 2021, UK real GDP growth is now forecast to slow significantly to 4.3% in 2022 and to -1.0% in 2023, according to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios. With business activity contracting for the fifth straight month, the UK may enter a prolonged recession. • **Energy prices, inflation, interest rates, and increased taxes**: Increased pressure on consumers and businesses from energy	• **Sequential amortisation**: There is no leakage of funds towards principal payments of junior notes. Credit enhancement of senior notes is expected to increase over time. • **Liquidity reserve**: The transaction benefits from a liquidity reserve sized at the higher of 4.5% of the Class A notes and GBP 500,000, which is available to cover senior fees and expenses as well as interest due on the senior notes. • **Junior cure rights**: The junior noteholders may increase their junior notes at a minimum of 5% of the outstanding balance each time to cure any	• **Junior base note interest** is paid ahead of senior class principal if the performance triggers (threshold at 90%) are not breached. • **The servicer is part of the seller group**: Performance-related fee subordination rules mitigate this risk.

	Morningstar Baseline Macroeconomic Scenarios forecast unemployment at 3.8% for YE2022 and 4.5% for YE2023.	price increases, high inflation, rapid increase in interest rates, and extra taxes from the new revised budget. • **Increased mortgage rates and mortgages reverting to floating after a limited fixed-rate term**: The average mortgage rate, which was 2.66% at the start of the year, peaked in October at 6.51% and has since then reduced to 5.63%. The BoE anticipates circa four million people to be hit by higher mortgage costs as the fixed-rate deals expire. This will put further burden on the consumers.	note default. Junior cure rights are limited to two occasions unless senior noteholders provide a written consent. • **Hedging**: Interest rate risk is mitigated with an interest rate cap agreement. The notional is sized equal to the rated note balance at issuance and has a pre-determined amortisation schedule. • **Low transaction costs**: Majority of the receivables pay on direct debit. Any future recovery costs are covered by the seller outside of the securitisation structure.

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