Commentary
European Structured Finance and Covered Bonds Outlook 2023

DBRS Morningstar
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Contents

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2023 Outlook: Bumps Ahead

At the outset of 2022, we expected the euro area and the UK economies to experience a robust post-pandemic recovery. However, the energy shock stemming from Russia's invasion of Ukraine has led to a surge in energy prices that has translated into increased inflation, large external imbalances, weak growth, additional supply-chain disruptions, and tighter monetary policies from the Bank of England (BOE) and the European Central Bank (ECB). In a nutshell, 2022 was a turbulent year with unusual macroeconomic and capital market volatility.

Looking ahead to 2023, the euro area and the UK economies face the risk of imminent recession, mainly because of the real income hit from surging energy bills. Still, the severity of the recession is unknown. A healthy labour market and strong consumer market can dampen the effect of a recession, but how these forces interplay could affect the performance of businesses, individuals, and ultimately European securitisation markets. DBRS Morningstar expects that 2023 will see the following:

- Weakening credit performance across the board but more pronounced in certain sectors:
  - Slowing economic growth in 2023 and the end of a long low-interest rate period.
  - Especially in sectors characterised by floating-rate debt, refinancing exposure, and/or exposure to more vulnerable borrowers.
- No significant credit impact on ratings, given that the looming recession is expected to be mild:
  - Mild recession scenario not likely to differ in terms of the credit impact on most of our ratings.
  - Deeper recession—especially one brought on by more geopolitical shocks, a revival of the Coronavirus Disease (COVID-19) pandemic, or a sharp decline in asset values—might, however, have a greater effect on ratings.
- Environmental, social, and governance (ESG)'s continues to gain traction:
  - Given other more pressing concerns, such as inflation and rising rates, ESG is not a top priority, but continues to gain significance.
- Securitisation issuance expected to keep moving at a slow and steady pace:
  - Total issuance for the year 2022 was EUR 209.6 billion compared with our initial forecast of EUR 200.0 billion to EUR 210.0 billion, somewhat higher than our revised forecast of EUR 180.0 billion to EUR 190.0 billion in mid-2022 due to a stronger-than-expected Q4 2022 in terms of retained transaction volume.

- For 2023 we forecast total issuance of EUR 185.0 billion to EUR 195.0 billion, with distributed issuance of EUR 85.0 billion to EUR 95.0 billion compared with EUR 81.2 in billion investor-placed issuance in 2022.
- The bounceback in distributed European securitisation issuance will occur once there is more certainty about the peak of the central bank tightening cycle from Q2 onwards.

Performance Outlook on European Structured Finance and Covered Bonds

The table below provides further detail on our expectations for the year across the more prominent European structured finance sectors and covered bond (CB) markets.

	Sector	2023 Credit Outlook	2023 Ratings Outlook
RMBS	UK Prime	Negative	Stable
	UK Nonconforming	Negative	Stable
	UK Buy-to-Let	Negative	Stable
	Ireland Prime	Stable	Stable
	Ireland Reperforming	Negative	Stable
	Netherlands	Negative	Stable
	Italy	Stable	Stable
	Spain Prime	Stable	Stable
	Spain Reperforming	Negative	Stable
	Other European Jurisdictions	Negative	Stable
ABS	Consumer Loans	Stable	Stable
	Prime	Stable	Stable
	Near-Prime – Non-prime	Negative	Stable
	Salary Assignment Loans (SAL)	Stable	Stable
	Credit Cards and Revolving Lines of Credit	Negative	Stable
	Autos	Stable	Stable
	Captive	Stable	Stable
	Noncaptive	Negative	Stable
CMBS	Office	Negative	Negative
	Retail	Negative	Negative
	Industrial	Stable	Stable
	Multifamily	Stable	Stable
	Hospitality	Stable	Stable
Structured Credit	BSL CLOs	Negative	Stable
	SME CLOs	Negative	Stable
NPLs	Cyprus	Stable	Stable
	Ireland	Stable	Stable
	Italy	Negative	Negative
	Portugal	Stable	Stable
	Spain	Negative	Stable
	UK	Stable	Stable
Covered Bonds	Spain	Stable	Stable
	Germany	Stable	Stable
	Italy	Stable	Stable
	Portugal	Stable	Positive
	Greece	Stable	Stable
	Nordics	Stable	
	Other Countries	Stable	

Exhibit 1 European Structured Finance Credit Outlook 2023

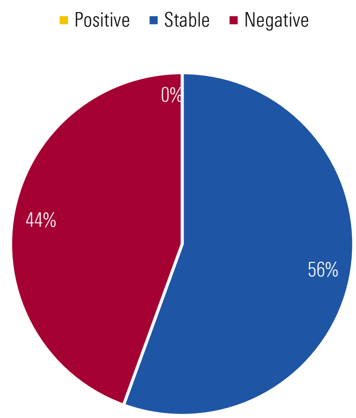
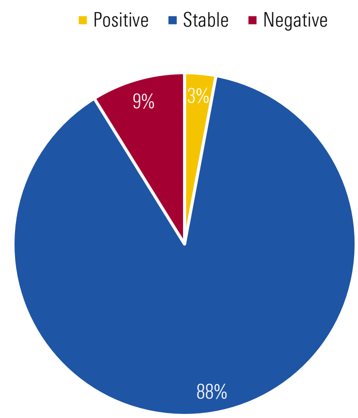


Exhibit 2 European Structured Finance Rating Outlook 2023



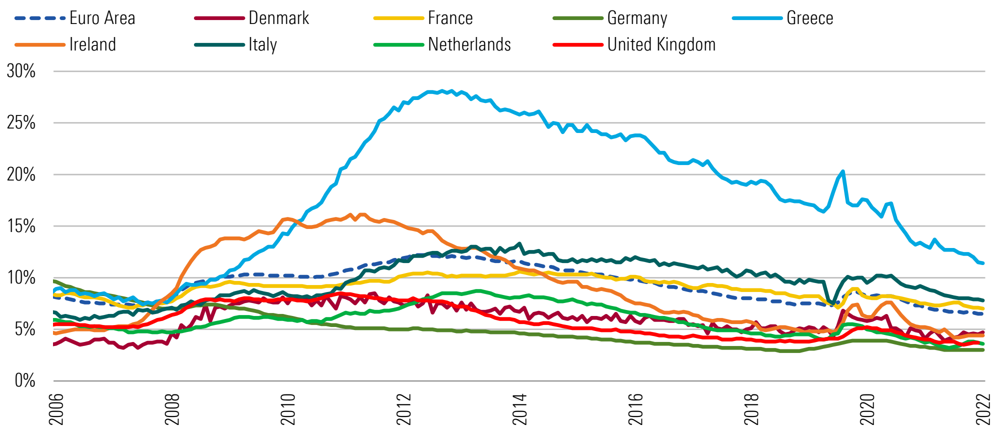
Source: DBRS Morningstar.

Deteriorating Growth Projections, Supply Shocks, and Rising Inflation

Euro-area growth predictions for 2023 have further deteriorated, with several European economies now expected to have negative growth. The consensus forecasts for the UK and Germany have fallen to -1.0% and -0.6%, respectively, while Italy's economy is predicted to contract by 0.1%. Estimates for Denmark, France, Greece, the Netherlands, and Poland continue to be optimistic, but taken together, these forecasts indicate stagnation for much of Europe.

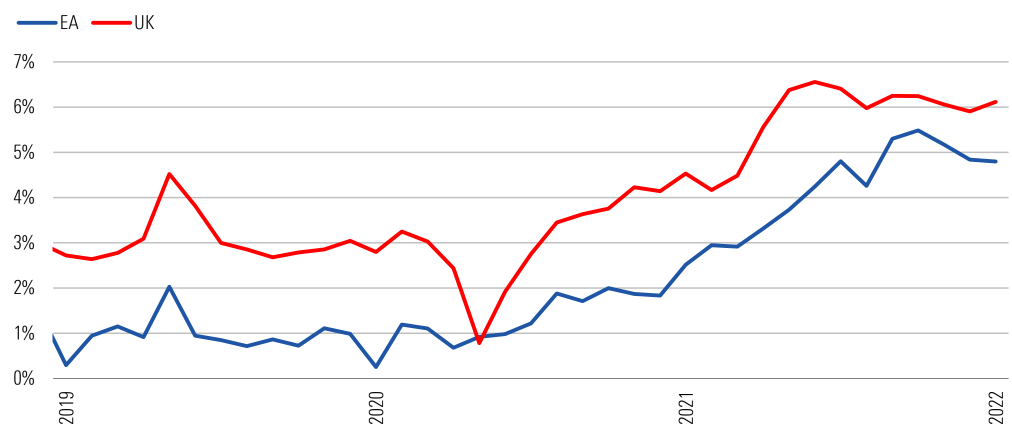
2022 had a fairly robust start for the European and the UK labour markets, with the unemployment rate reaching a record low (see Exhibit 3) despite a subpar growth backdrop and wages growing notably faster (see Exhibit 4). The unemployment rate has remained low since the pandemic's peak and household savings expanded during the pandemic. The likelihood of a funding crunch has decreased because banks are better capitalised and have further derisked in recent years; however, lower unemployment and higher wage growth have added to the inflationary pressure.

Exhibit 3 Unemployment Rates in Europe and the UK



Source: DBRS Morningstar, Eurostat, ONS, Haver Analytics.

Exhibit 4 Wage Growth (Not Seasonally Adjusted (NSA), Year-Over-Year (YOY) % Change)

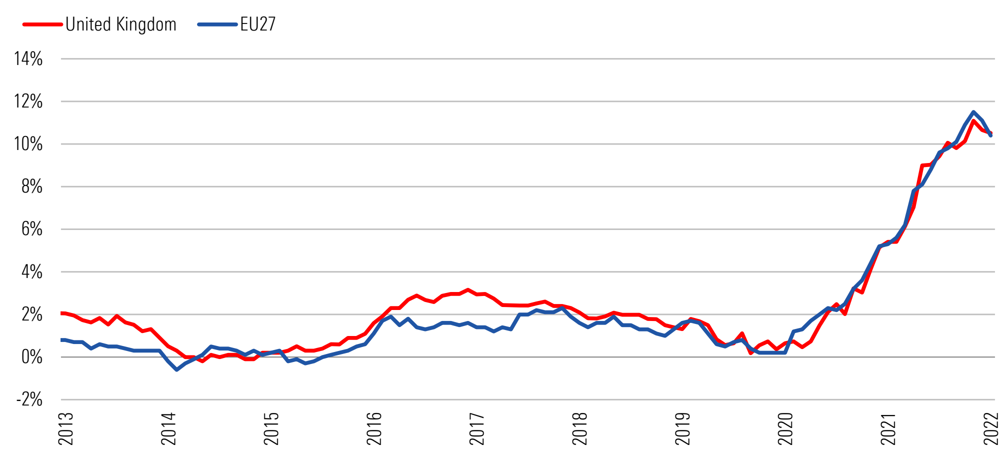


Source: Indeed Hiring Lab, Haver Analytics.

For 2023, only a slight increase in average unemployment—to 0.4 percentage points from 0.2 percentage points—compared with 2022 levels is anticipated across much of Europe. Forecasts are slightly worse for the UK (+0.7 percentage points), Denmark (+0.6 percentage points), and the Netherlands (+0.6 percentage points). This will influence the job market as the predicted rate of unemployment growth is expected to be slow. For further details on DBRS Morningstar's macroeconomic outlook, please see our commentary *Baseline Macroeconomic Scenarios for Rated Sovereigns: December 2022 Update*, published on 21 December 2022.

The latest consumer price index (CPI) readings from the European Union (EU) decreased to 10.4% in December 2022 from 11.1% in November 2022) and from the UK decreased to 10.5% in December from 10.7% in November, suggesting that inflation is beginning to moderate. This cool-off will relieve the pressure on central banks, which could result in more stable interest rate expectations. Likewise, more certainty about interest rates development and credit performance could stabilise spreads for European securitisations.

Exhibit 5 CPI: All Items (NSA, YOY % Change)



Source: Office for National Statistics (ONS), Haver Analytics.

The energy crisis brought on by Russia's invasion of Ukraine has put inflation well over the target range and, if inflation stays high, the high-interest rate cycle may continue for some time. When combined with worsening macroeconomic indicators, inflation can negatively affect borrower affordability and, consequently, the overall performance of securitised portfolios.

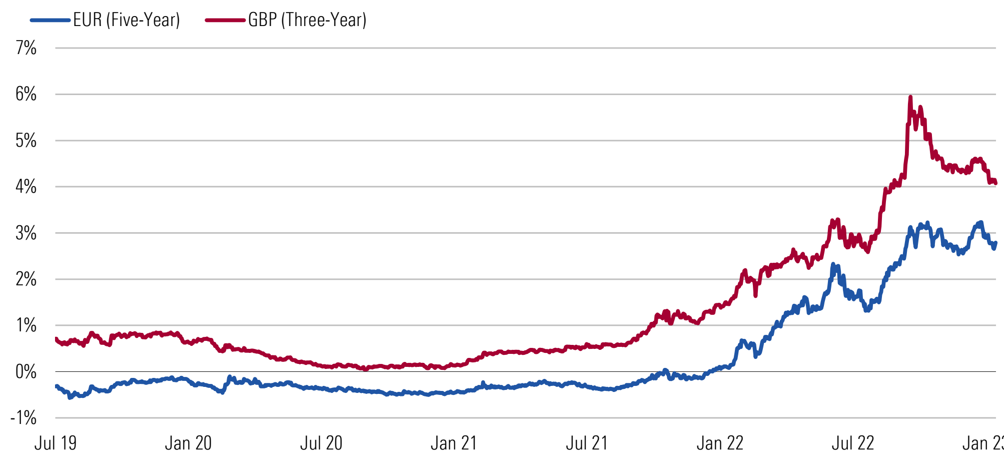
2023 Securitisation Issuance: Optimism for Recovery

Last year, the European securitisation market saw the strongest Q1 issuance (EUR 66.2 billion) since the global financial crisis (GFC). However, the markets faced a difficult combination of high inflation, rising interest rates, and widening spreads, which led to a sharp, near-50% drop in issuance to EUR 37.8 billion in Q2 2022 versus Q1 2022 and remained around the same levels at EUR 38.7 billion in Q3 2022 before picking up in Q4 2022 to EUR 66.7 billion.

Total issuance figures of retained and distributed European securitisation in 2022 stood at EUR 128.4 billion and EUR 81.2 billion, respectively, totalling EUR 209.6 billion. Even though there was a 15.1% decrease in overall issuance in 2022 compared with the previous year, residential mortgage-backed securities (RMBS) and small and medium-size enterprise collateralised loan obligation (SME CLO) issuance volumes rose in 2022 compared with 2021. RMBS issuance volumes rose to EUR 109 billion in 2022 from EUR 97.0 billion in 2021 while SME CLOs issuance volumes climbed to EUR 32.6 billion from EUR 30.9 billion. Investor-placed issuance declined in all markets to EUR 81.2 billion in 2022 from EUR

116.9 billion in 2021 (-30.5%), but particularly in NPL (-84%) and CMBS (-77%). This marks 2022 as the year with the lowest investor-placed European securitisation since 2020, when it was EUR 72.3 billion, and 2022 was hence the second-lowest investor placed issuance since the GFC. By number of new transactions, 2022 total issuance also declined by 27% compared with 2021 (to 215 from 296). The higher decline of total transactions issued compared with total issuance volume decline (15.1%) is a reflection of a larger proportion of retained transactions last year. Retained securitisation tends to be larger than investor-placed transactions.

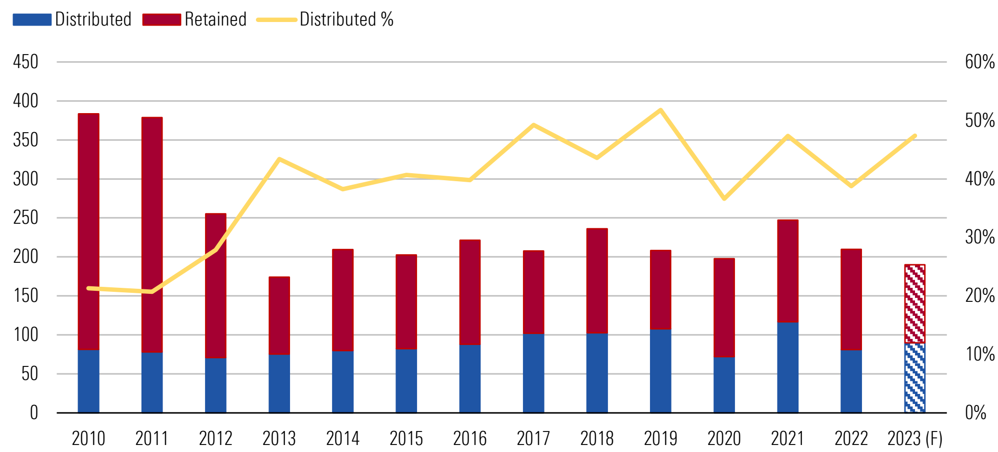
Exhibit 6 EUR (Five-Year) and GBP (Three-Year) Swap Rates



Source: Investing.com.

For 2023, we expect total issuance of EUR 185 billion to EUR 195 billion, with distributed issuance of EUR 85 billion to EUR 95 billion. We expect less retained issuance, so total issuance would be similar to that in 2022. Distributed European securitisation issuance should bounce back once the supply-chain issues related to the ongoing Russia-Ukraine conflict improve, inflation begins to ease, and there is more certainty about the peak of the central bank tightening cycle, as well as European securitisation collateral performance. We expect the latter to occur toward Q2 2023 while we expect interest rates to come down once inflation eases in H2 2023, following which we believe that the issuance market will gain speed. That said, the energy crisis caused by Russia's invasion of Ukraine has kept inflation far above the target range and the high-interest rate cycle may be extended for a prolonged period of time if inflation remains elevated.

Exhibit 7 Historical Total European Securitisation Issuance Volumes (EUR billion)

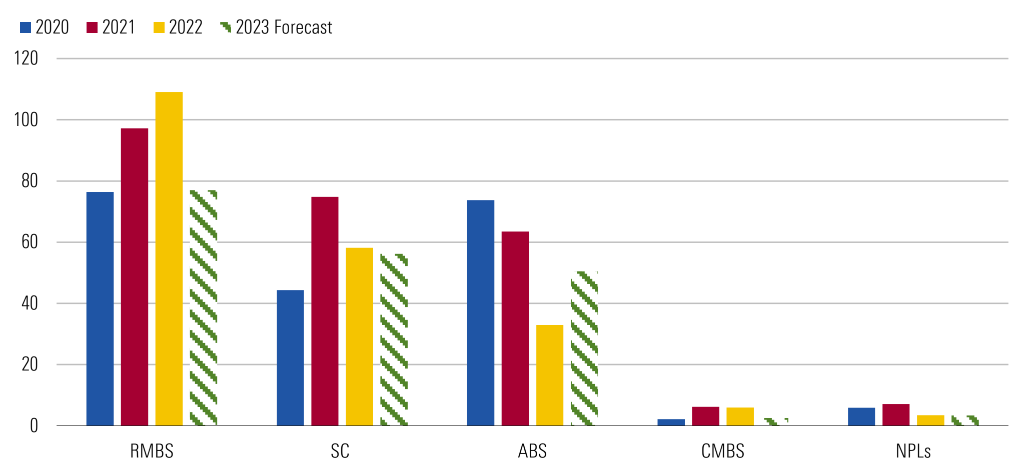


Source: Concept ABS, DBRS Morningstar.

We anticipate a rise in the volume of asset-backed security (ABS) transactions, a fall in RMBS and commercial mortgage-backed security (CMBS) issuance, and a minor drop in the issuance of structured credit and nonperforming loans (NPLs) in 2023 (see Exhibit 8).

For further details on European securitisation issuance in 2022, please also see our commentary, *European Structured Finance 2022 Year in Review*, published on 5 January 2023.

Exhibit 8 European Securitisation Issuance Volumes Split by Asset Classes and 2023 Forecast (EUR billion)



Source: DBRS Morningstar and ConceptABS.

RMBS

Driven by some large retained transactions, European RMBS issuance by volume increased by 30% in 2022 compared with 2021. By number of transactions, 2022 had fewer issuances than expected due to volatile market conditions. With a gradual reopening of the investor-placed market, we expect the number of transactions to increase to about 80 in 2023, in line with 2021 levels. However, in terms of overall issuance volumes, we expect a contraction to about EUR 80 billion in 2023 from EUR 109 billion in 2022. Most of the contraction will be due to one-off effects as the issuance amount in 2022 was inflated by jumbo retained transactions in France and Germany, which are unlikely to be repeated in 2023.

We expect fewer retained transactions and more investor-placed deals as banks will need to replace central bank funding by mid-2023. While specialised lender issuances in the UK and the Netherlands have been subdued for most of 2022, we expect a rebound in 2023—even if new originations shrink due to unpalatable margins for lenders, the portfolios originated through 2022 are currently parked in warehouses that necessitate a securitisation exit sooner rather than later.

ABS

European ABS issuance was weak in 2022. Total year-end issuance stood at EUR 32.9 billion in 2022, with Germany leading the charge at EUR 7.7 billion followed closely by France at EUR 5.6 billion. Auto loans continue to represent the highest issuance at EUR 18.4 billion, followed by consumer loans at EUR 14.1 billion and commercial loans at EUR 2.6 billion.

DBRS Morningstar's issuance forecast for auto ABS in 2023 is between EUR 20 billion and EUR 24 billion, reflecting a moderate recovery in new vehicle financing, an expectation that average financed amounts will increase as European markets transition to alternatively fuelled vehicles, and the continued pent-up demand for vehicles that exceeds supply in many European jurisdictions. In 2022, the growing proportion of auto ABS issuance was related to used vehicle financing sponsored by noncaptive originators. In 2023, DBRS Morningstar foresees captive originators and new vehicle financing to be the primary market drivers.

For consumer ABS, DBRS Morningstar expects in 2023 a return to average volumes of between EUR 15 and 20 billion. However, it remains to be seen what portion of issuance will be publicly offered to the market, either privately placed or retained. In fact, retained deals tend to be larger in size, smaller in number, and characterised by longer reinvestment periods whereas private placements are more numerous but smaller in size.

Credit card ABS is historically the most difficult sector to predict and 2023 is no less challenging. On the one hand, potential credit deterioration is likely to cause lower origination volumes similar to those seen during the pandemic; on the other hand, higher inflation and rising interest rates could encourage households to use credit cards more frequently. Furthermore, some lenders rely more on wholesale funding while others that have ample funding options are more opportunistic, depending on market conditions. DBRS Morningstar expects that some form of equilibrium will continue with issuance volumes similar to the average over previous years of around EUR 5 billion.

CMBS

The market volatility caused by economic and policy factors negatively affected European CMBS issuance last year as only four public transactions were placed in 2022 versus 15 in 2021. Also, there was a GBP 3 billion commercial real estate (CRE) CLO retained by the arranger. Retained issuance is unusual in European CMBS.

DBRS Morningstar thinks that the European CMBS new issuance market is likely to remain subdued in 2023, especially in the first quarter. The expected stabilisation of interest rates and spreads during the year may open windows for new issuance. DBRS Morningstar expects a maximum of seven transactions in 2023 for a total amount of EUR 2.5 billion to EUR 3.0 billion.

We still anticipate that large single loans will constitute the lion's share of new issuances, but would not be surprised to see one or two pooled European conduit CMBS transactions including eight or more loans, especially in the second half of the year.

Structured Credit

Structured credit issuance dropped to EUR 58.1 billion of issuance in 2022 from EUR 69.7 billion in 2021. For broadly syndicated loan (BSL) CLOs, issuance dropped to EUR 25.5 billion from EUR 38.6 billion and, for SME CLOs (which is driven by retained deals), issuance was up slightly to EUR 32.6 billion from EUR 30.8 billion.

Given the current high spreads and lower investor demand caused by reallocation decisions in a higher interest rate environment, investor demand will likely be lower in 2023 than in prior years. However, the market is now pricing in the higher interest rate environment and, if expectations that inflation already peaked in Q4 2022 and interest rates will peak in mid-2023 remain intact, then spreads should stabilise at levels that allow for BSL CLO economics to function. We expect CLO issuance to be slightly below or, at best, in line with 2022 figures.

NPLs

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).

Expectations for 2023 issuance remain dominated by the performance of peripheral economies and, in particular, southern European jurisdictions; however, it is possible that we will see rated transactions in new jurisdictions. For Italy and Greece, issuance prospects depend on the extension of Italy's GACS scheme and Greece's Hellenic Asset Protection Scheme (HAPS) (which expired in October 2022). Such transaction volumes are relatively unaffected by European securitisation market conditions, considering that senior classes are usually retained. 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.

Overall, DBRS Morningstar expects public NPL securitisation issuance in 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.

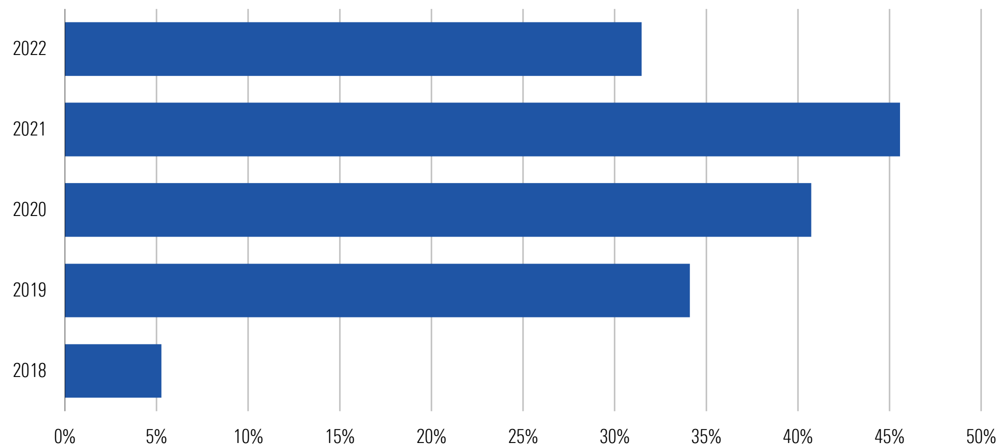
Covered Bonds

Europe witnessed a record volume of CB issuance in 2022, as various stimulus measures launched by governments and central banks, including the third series of the ECB's targeted longer-term refinancing operation (TLTRO III) came to an end. We expect overall issuance in 2023 to stay flat or decline slightly from the record levels seen in 2022, which would be difficult to match this year. However, CBs will continue to be an important tool to finance the upcoming TLTRO III redemptions that are due in 2023. After eight years, the ECB's purchase programme ended in mid-2022, but it will continue to sustain new issuance as the euro system will reinvest part of the principal payments from maturing securities in 2023. However, we expect a lower ECB participation in the primary market. We also expect a significant portion of CB issuances to be retained for repo purposes, as usual.

Simple, Transparent and Standardised (STS) Securitsations

In Europe, STS securitisations are governed by the EU's STS Securitisation Regulation, which came into force in 2019. The framework sets out rules and standards that apply to STS securitisations issued in the EU or sold to EU investors. Under the regulation, STS securitisations must meet certain criteria to be eligible for STS verification, including requirements related to the underlying assets, the structure of the securitisation, and the information that must be disclosed to investors. The regulation aims to increase the transparency and standardisation of STS structures and to promote the development of a robust and liquid market for these instruments. However, amid the negative market environment, STS issuances fell to 31.5% of total issuance in 2022 compared with 45.6% in 2021.

Exhibit 9 Percentage of Total Issuance with STS Verification



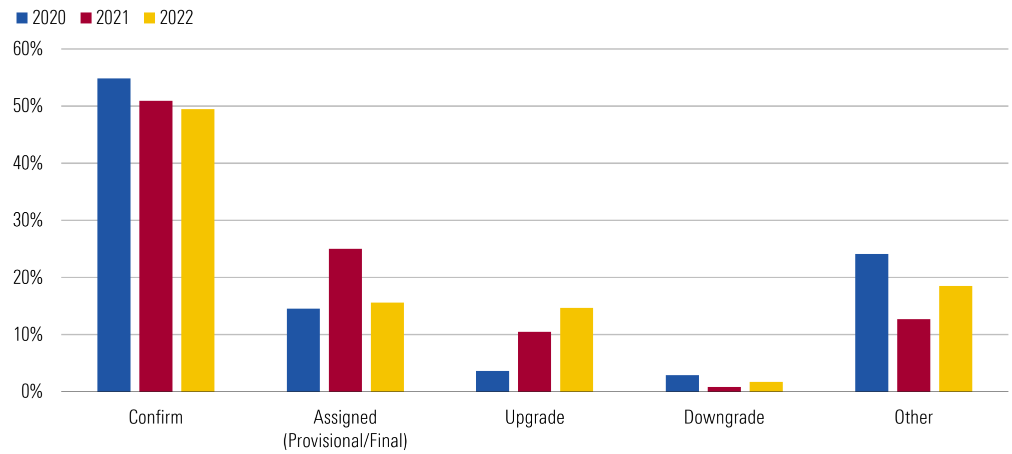
Source: Concept ABS, DBRS Morningstar.

DBRS Morningstar Structured Finance Rating Actions: Stable Outlook for 2023

The rating performance of structured finance transactions in 2022 was commensurate with that of 2021. The percentage of confirmed ratings was marginally lower, balanced by a marginal increase in upgrades. In 2022, the number of upgrades in RMBS was higher than usual because of a methodology update for UK RMBS, which led to significant upgrade activity for the mezzanine notes in the sector. Exhibit 10 below shows that there was an increase in 2022 of Under Review with Negative Implications rating actions (represented by the Other column). The Other category also includes any ratings withdrawn either due to repayment or at the issuers' request. The lower number of assigned ratings reflects lower issuance activity, especially if measured by number of transactions.

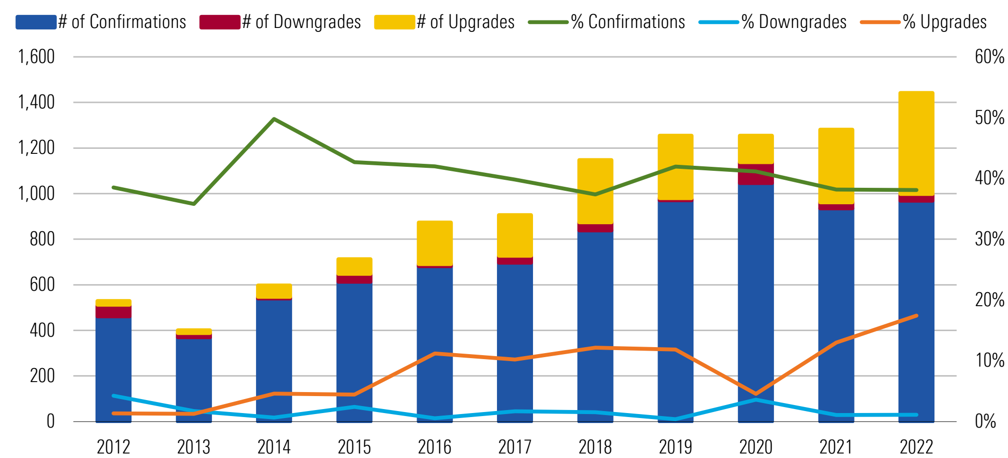
Given a modest recession scenario for 2023, we anticipate a stable ratings outlook with a few exceptions. However, a deeper recession, particularly one spurred on by additional geopolitical shocks, a resurgence of the pandemic, or a dramatic decrease in asset values, would have a greater impact on ratings.

Exhibit 10 DBRS Morningstar Total Annual Rating Actions



Source: DBRS Morningstar.

Exhibit 11 European SF Rating Activity

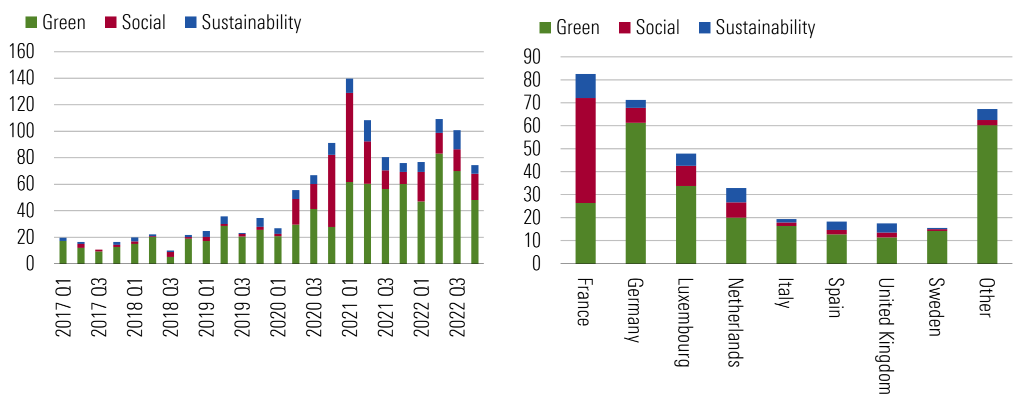


Source: DBRS Morningstar.

ESG Factors: On the Back Foot, but Not Forgotten

ESG factors continue to gain traction and a growing number of market participants are incorporating these factors into their investment decisions. Total European ESG and sustainability-related bond issuance volumes stood at EUR 361 billion in 2022, lower than EUR 404 billion in 2021, according to Dealogic.

Exhibit 12 European ESG-Related Bond Issuance (EUR billion)



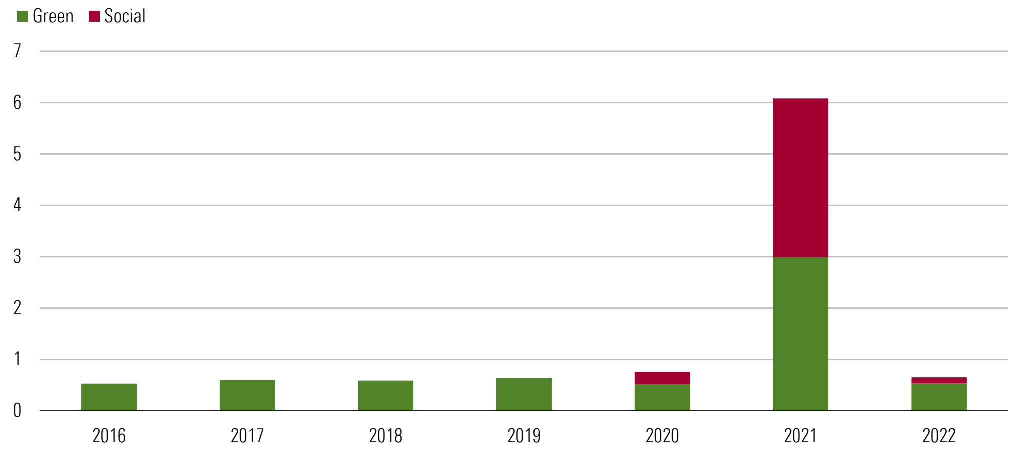
Source: Dealogic.

Based on the number of issuances in Europe, France has been the largest contributor to European green, social, or sustainable distributed bond issuance with EUR 82.61 billion deal value, followed by Germany at EUR 71.33 billion. Green bond issuance stands out as the ESG subasset class that has grown the most during 2022, with a total deal value of EUR 248 billion. Germany ranked number one in green bond issuance with a deal value of EUR 61 billion. ESG-related total bond issuance deal value for the UK was EUR 17 billion.

ESG may not be a top priority in current times given that other, more pertinent issues like inflation and rising rates may have created a smoke screen in the way of long-term goals, but it will keep gaining momentum in 2023 and beyond.

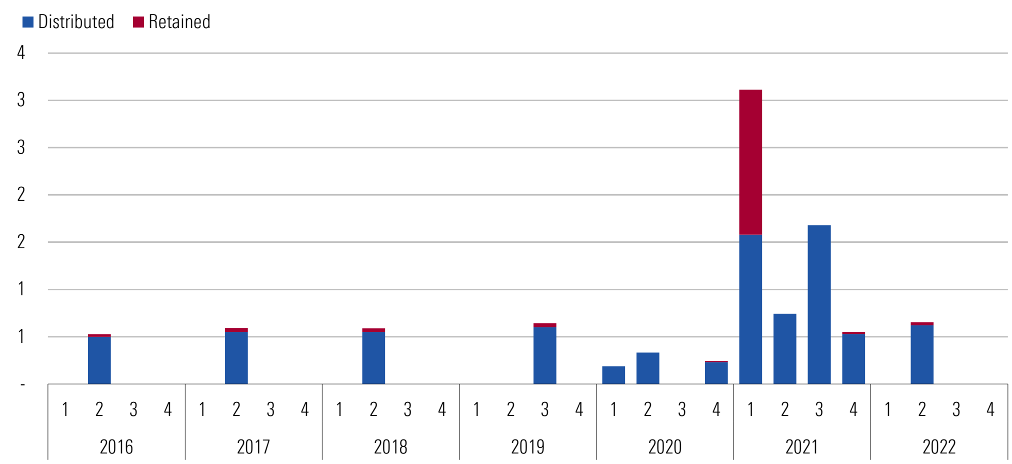
The European securitisation market in recent years has seen several securitisation bond issuances carrying green or social bond labels, but 2022 marked a substantial decline compared with 2021. This decline was disproportionate to the total or investor-placed issuance reduction.

Exhibit 13 Green and Social Bonds Issuance Amount (EUR billion)



Source: DBRS Morningstar, Concept ABS.

Exhibit 14 ESG-Marked European Securitisation Issuance, by Quarter, Retained vs. Distributed, 2016-Q2 2022 (EUR billions)



Source: DBRS Morningstar, Concept ABS.

RMBS remains the dominant asset class where transactions were also accorded ESG-related second party opinions (SPOs) in Europe, with at least one green deal coming to the market every year since 2016. This did not change in 2022. CMBS is in second place for ESG-related SPO securitisation transactions, with two deals issued in each of 2020 and 2021, while only two ABS SPO transactions (social bonds) were issued in 2021 and 2022 from the same originator.

After peaking at EUR 3.0 billion in 2021, green bonds issuance in the structured finance space contracted in 2022 to about EUR 0.5 billion, which is in line with the issuance levels recorded before 2021. In 2023, we expect green bond issuance to increase as the energy crisis has put the question of energy efficiency in houses at the forefront of government agendas across Europe. The increased incentives are likely to attract an increasing number of lenders to approach this segment of the market.

Social bonds issuance was also down in 2022, contracting to just above EUR 100 million compared with EUR 2.8 billion in 2021. Minimal issuance is also likely for 2023 as lenders are less likely to target lower-income borrowers while the cost-of-living crisis continues to run its course.

In covered bonds (CBs), with interest rates continuing to rise, green CBs are gaining traction in a market where the CB instrument has performed well.

RMBS

Given a combination of declining house prices, economic stagnation, higher mortgage rates, and modest unemployment increases (albeit from historically low levels), DBRS Morningstar expects mortgage arrears and defaults to increase. This should not pose a significant risk to European residential RMBS ratings but, as a result of an uptick in arrears, we may see fewer upgrades than usual in 2023.

Mortgage borrowers are learning to live with higher mortgage rates, especially new borrowers and borrowers coming to the end of their mortgage rate period, who will find their mortgages much more expensive than before. Most borrowers who refinance will likely have benefitted from house-price growth since purchasing their properties, so their loan-to-value (LTV) ratios would be favourable. Furthermore, since the GFC, lenders have become more prudent and usually factor in some rate rises when underwriting mortgages. Unlike during the GFC, wherein many borrowers had weak credit profiles and affordability issues, we now expect borrowers to be better equipped to deal with higher mortgage rates.

Some borrowers who have accumulated savings during the pandemic can also rely on those to help with higher living and mortgage costs. The most affected borrowers will be those in variable or short-term fixed markets (e.g., the UK and Ireland), where a significant number of existing borrowers will face higher rates in the next year. For markets that are predominantly fixed (e.g., the Netherlands, France, Belgium, and Germany) or have caps to the maximum floating rate payable on mortgages (e.g., Italy), existing mortgage holders will be shielded from rate rises for a longer period of time.

The following table provides detail on our expectations for the year across the more prominent RMBS markets in Europe. Please also see *European RMBS 2023 Outlook* for more details.

Sector	2023 Credit Outlook	Mortgage Arrears/Defaults	2023 Ratings Outlook
UK Prime	Negative	Moderate deterioration	Stable
UK Nonconforming	Negative	Considerable deterioration	Stable
UK Buy-to-Let	Negative	Considerable deterioration	Stable
Ireland Prime	Stable	Limited deterioration	Stable
Ireland Reperforming	Negative	Considerable deterioration	Stable
Netherlands	Negative	Moderate deterioration	Stable
Italy	Stable	Limited deterioration	Stable
Spain Prime	Stable	Limited deterioration	Stable
Spain Reperforming	Negative	Moderate deterioration	Stable
Other European Jurisdictions	Negative	Moderate deterioration	Stable

United Kingdom

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2023 UK RMBS Credit Outlook
Negative

As the UK economy enters a recession and navigates the cost-of-living crisis, borrowers are facing increased living costs, shrinking real salaries, and rising mortgage/rent payments. The negative outlook is further underpinned by the expectation of house-price declines, which could reverse some of the price rises during and since the pandemic. As a mitigant, due to improved underwriting standards and more cautious lending after the GFC, UK borrowers are expected to weather this negative cycle better than in the aftermath of 2008. Moreover, UK house prices still benefit from structural undersupply and government support. We do not believe the expected arrears deterioration to affect the stability of ratings in 2023.

Macroeconomic Scenario	House Prices	Credit Risk	Issuance
Negative • The economy is already in recession with a further 1% GDP contraction expected in 2023. • Inflation is higher than in the euro area, expected to peak at 11% in Q4 2022 and to remain elevated but lower than 10% in 2023. • Unemployment is expected to increase by 0.7% in 2023.	**Negative** • The Office for Budget Responsibility forecasts a 9% decline between Q4 2022 and Q3 2024. • While a supply shortage will remain, higher mortgage rates will dampen demand from both owner-occupiers and investors.	**Negative** • OBR expects a 4.3% reduction in household disposable income (HDI). It will take more than five years for the real HDI to climb back to pre-pandemic levels. • There will be higher mortgage rates and payment shocks for borrowers looking to refinance. • Buy-to-let borrowers face a greater challenge because the increase in mortgage payments may not be fully recouped by higher rents, especially in a prolonged recession.	**Negative** • Market turbulence for UK bond yields could make publicly placed securitisation difficult to achieve. • Low yields locked in by the borrowers in the short term compared with the rising cost of funding will make deal economics unpalatable.
Positive • The government has more fiscal headroom than other European peers to support households through the cost-of-living crisis.	**Positive** • The UK government has a track record of supporting housing market (e.g., the stamp duty holiday introduced at the start of the pandemic).	**Positive** • Borrowers in the UK have more refinancing options than peers, even in a downturn market (e.g., affordability can be stretched through term extension).	**Positive** • Even if mortgage issuance falls, there is a 'backlog' of new originations sitting in warehouses that could be tapped for public securitisations. • Nonbank lenders need a securitisation exit even if the economic terms are not as favourable as in the past decade.

Ireland

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2023 Irish RMBS Credit Outlook

Stable for prime / Negative for reperforming

The Irish economy performed relatively well in 2022 with GDP growth of 8.8% compared with the rest of Europe and is expected to grow in 2023 as well, albeit at a slower pace of 1.3%. Unemployment will likely increase by 0.2% but, in absolute terms, will remain quite low. House prices have been growing, but the macroprudential rules introduced since 2015 seem to have prevented a bubble. Prime Irish mortgage loans should see only a modest deterioration in arrears and default levels; however, greater credit concerns remain about Irish mortgage portfolios that are composed of RPLs. We expect the impact of rising mortgage rates and the cost-of-living crisis to affect these portfolios more significantly, potentially resulting in higher default levels. Even for this more exposed sector, we believe ratings will remain stable in 2023, considering transaction deleveraging and a positive house-price trajectory.

Macroeconomic Scenario	House Prices	Credit Risk	Issuance
Negative • GDP growth will slow in 2023 (1.3% vs. 8.8%) with downside risks linked to reliance on global economic partners and the UK in particular. • The unemployment rate is expected to modestly increase. • High inflation will persist in the eurozone.	**Negative** • Rising mortgage rates and unemployment will likely put some downward pressure on house-price growth.	**Negative** • Reperforming portfolios are heavily exposed to rising mortgage rates. • Loosened macroprudential mortgage policies will be introduced in January 2023.	**Negative** • Mortgage lending volumes may decline in 2023. • Nonbank specialist lenders relying on wholesale market for funding may reduce lending.
Positive • Ireland is coming off a very strong 2022 in terms of GDP growth (8.8%). • The economy is also expected to perform better than most other eurozone countries (GDP growth of 1.3%). • The government fiscal balance is in good order, allowing for strong measures in fighting the high cost of living through 2023.	**Positive** • While prices have recently increased rapidly, they remain just slightly above 2007 levels. • While house-price growth might see a modest correction in 2023, there remains a structural undersupply of housing.	**Positive** • Ireland has a high saving rate (among the highest in Europe). • Around 50% of outstanding mortgages are originated under macroprudential rules, which restricts LTV and loan-to-income (LTI) ratios.	**Positive** • In the medium term, there will be healthy demand for mortgage lending.

Netherlands

2023 Dutch RMBS Credit Outlook

Negative

The Netherlands has experienced one of the largest house-price increases in Europe since the onset of the coronavirus pandemic. A strong economy and record low mortgage rates have fuelled this growth, stretching mortgage affordability. We expect Dutch house prices to correct in 2023 due to a combination of factors, including inflation, rising mortgage rates, and the general economic situation. We also expect GDP growth to reduce significantly to 0.4% in 2023 from 4.4% in 2022. However, we anticipate that mortgage performance will not worsen significantly as existing borrowers are protected from immediate rate rises due to the long-term fixed-rate nature of Dutch mortgages. Dutch mortgage borrowers will benefit from rising nominal wages, built-in property equity, and savings buffers accumulated during the pandemic. We believe that the expected house-price correction and moderate arrears deterioration will not affect the stability of Dutch RMBS ratings in 2023.

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Macroeconomic Scenario	House Prices	Credit Risk	Issuance
Negative	**Negative**	**Negative**	**Negative**
• GDP growth is expected to significantly slow down (0.4% vs. 4.4%). • A 0.6% rise in unemployment is expected. • Inflation remains higher than in the rest of the eurozone. • There has been a significant loss of households' purchasing power because wages lag inflation. • Consumer confidence is at its lowest level on record.	• Correction is expected in 2023, which partially reverses gains made since the onset of the pandemic. • The number of property sales should decline due to stretched affordability.	• Higher rates and increasing unemployment will lead to a modest rise in arrears and defaults. • There is a trend toward variable and cheaper short-term fixed mortgages to avoid locking into currently high rates for longer periods.	• Mortgage lending volumes could decline, reflecting fewer housing transactions.
Positive	**Positive**	**Positive**	**Positive**
• Support measures protect households from higher public spending. • The Netherlands has relatively stable public debts compared with the eurozone. • The Dutch financial sector's strong starting position offset high inflation and interest rate rises. • The unemployment rate is low, even accounting for the expected increase in 2023.	• Even after correction, house prices are expected to be higher than at the start of the pandemic. • Positive demand-supply balance for houses underpins long-term house prices.	• There is a long-term fixed-rate market in the Netherlands with an average fixed-rate period for new mortgage loans of more than 15 years in Q1 2022. • The refinancing/rate reset risk is low compared with the eurozone; currently ~75% of outstanding mortgage debt is fixed for more than five years. • The Dutch mortgage market has historically performed very strongly, even during recessions.	• More green mortgage originations from Dutch banks may lead to more "green" issuances. • More BTL issuances are expected as the number of lenders in this space is growing.

Italy

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2023 Italian RMBS Credit Outlook

Stable

The typically low private household indebtedness coupled with traditionally sticky house prices should keep Italian mortgage performance under control in 2023. While the potential economic stagnation could increase arrears, we do not believe that high inflation will affect residential borrowers in Italy more than in peer countries. The stock of floating-rate loans and the unsavoury trend of new borrowers opting for a variable rate in 2022 are concerning in the current rising interest environment, but low mortgage leverage and conservative lending criteria should help borrowers and lenders alike to weather the cost-of-living crisis without much hassle. Thanks to a high level of credit enhancement, we expect Italian ratings to remain stable even in a more adverse scenario wherein delinquencies pick up considerably.

Macroeconomic Scenario

Negative

- After recovering from the pandemic and seeing 3.7% growth in 2022, GDP is expected to stagnate in 2023 (-0.1%) with the unemployment rate climbing to 8.5% from 8.1%.
- Sustained high inflation of almost 9% in 2022 should persist in 2023 and at higher levels than the eurozone average of 7% to 8%).
- Due to high public debt, the government may not sustain households through a prolonged period of high inflation.

Positive

- Internal demand and investment have been bolstered by the EU-funded National Recovery & Resilience Plan. While creating inflationary pressures, the plan will keep positively affecting the overall economy through 2023.

House Prices

Negative

- Despite a post-pandemic rebound, Italian residential property prices remain among the most structurally depressed in Europe, with the national HPI still at a lower level than before 2013.

Positive

- Outside Milan and Rome, house prices in Italy are historically sticky in expansionary and recessionary cycles.
- Even in a downside scenario, we expect house-price corrections to be marginal compared with the rest of Europe.

Credit Risk

Negative

- About 40% of the outstanding mortgage stock is linked to a variable rate such as Euribor, which may cause a pickup in arrears in 2023.
- As offered rates increased through 2022, most Italian new borrowers preferred floating-rate loans as the initial instalments are currently lower than with fixed-rate loans, thus creating a pocket of vulnerable borrowers that have not deleveraged their loans yet.

Positive

- Most lenders that offer variable rates have an explicit cap to the interest rate payable by the mortgagor.
- The overall household indebtedness in Italy (stable at 64% of the disposable income) is among the lowest in Europe so that households are less vulnerable to inflationary pressures on their income and typically do not have further debt to repay in addition to mortgage payments.

Issuance

Negative

- As market rates rise, Italian issuers (mainly consisting of large retail banks) may prefer covered bond issuances to RMBS.

Positive

- The balance sheet reduction tied out by legacy nonperforming loan (NPL) portfolios means that lenders are better positioned than in the past to support households through tougher times and may avoid restricting originations to levels seen in recent past crises.

Spain

2023 Spanish RMBS Credit Outlook

Stable for prime / Negative for reperforming

Spain has historically been a floating-rate mortgage market. Until 2016, more than 90% of the mortgage originations were floating-rate loans mainly referenced to 12-month Euribor. Since then, and due to the low interest rate environment, banks started to promote fixed-rate mortgage loans. As of mid-2022, the Spanish outstanding mortgage loan book consisted of approximately 30% fixed-rate mortgages. Prime Spanish mortgage loans will likely see only a modest deterioration in arrears and default levels, partly due to a higher share of fixed-rate loans and lower indebtedness levels. However, greater credit concerns remain about many Spanish mortgage portfolios composed of RPLs as we expect rising mortgage rates to affect these portfolios more significantly because of their floating-rate nature and these borrowers' vulnerability to the rising cost of living. We believe that a potential increase in delinquency levels will not affect the stability of Spanish RMBS ratings in 2023.

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Macroeconomic Scenario	House Prices	Credit Risk	Issuance
Negative • GDP growth will decelerate in 2023 (0.9% vs. 4.6%), similar to most European countries. • A modest increase of 0.3% in unemployment is likely. • High inflation and interest rates will continue to put pressure on households' disposable income.	**Negative** • Rising interest rates, along with the general economic slowdown, pose a risk to house prices.	**Negative** • Rising mortgage and unemployment rates will lead to some increase in arrears and defaults. • Spanish RPLs are most at risk due to their weaker borrower profile.	**Negative** • Reduced mortgage origination volumes could result in lower collateral available for securitisation. • Interest rate volatility and market conditions could affect securitisation issuances. Large retail banks may prefer covered bond issuances to RMBS.
Positive • Supportive government measures like those that the Spanish government approved on 24 November 2022 will help the most vulnerable borrowers.	**Positive** • Since 2005, house prices in Spain have only increased by 14.6% compared with an average of 68.3% in the EU. • Demand from foreign investors could sustain residential property prices, especially in some main cities.	**Positive** • Most vulnerable borrowers will have some protection from forbearance measures. • The gradual transition of the Spanish mortgage market toward fixed rates reduces systemic risk. • A high savings rate during the coronavirus pandemic leaves borrowers in better shape compared with 2008.	**Positive** • Reduced overcollateralisation requirements for Spanish CBs could result in more collateral being available for securitisations.

ABS

Unemployment is the main metric to demonstrate a positive correlation to arrears and losses in consumer finance products: credit performances may deteriorate if the effects of recession (and/or stagnation) drip down to employers and unemployment starts to rise. However, even if there is recession, its effect on ABS performance will be proportionate and thus limited, so long as any recession is moderate, as current forecasts would seem to suggest.

In general, non-mortgage consumer financing is expected to be more vulnerable to negative economic changes, but we should further distinguish within the sector between truly unsecured products and auto loans and/or a few other products that benefit from some form of protection. Moreover, in some jurisdictions, householders may prioritise secured auto loans and leases over mortgage products, since the repossession process for motor vehicles is faster and more efficient than the recovery process for mortgages, especially if the mortgage is on the household's home.

On interest rates, the (term) consumer loan sector is a mostly fixed-rate market. Hence, existing loans and affordability of monthly instalments are most often not affected by fluctuating interest rates, except in a few cases where interest charges are indexed to floating rates.

The following table provides detail on our expectations for the year across the more prominent ABS markets in Europe. Please also see *European ABS 2023 Outlook* for more details.

Sector	2023 Credit Outlook	2023 Rating Outlook
Consumer Loans	Stable	Stable
Prime	Stable	Stable
Near-Prime – Non-Prime	**Negative**	Stable
Salary Assignment Loans (SAL)	Stable	Stable
Credit Cards and Revolving Lines of Credit	**Negative**	Stable
Autos	Stable	Stable
Captive	Stable	Stable
Noncaptive	**Negative**	Stable

Consumer Loans

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2023 Credit Outlook

Stable

This sector shows signs of performance deterioration with a modest increase in arrears. Although relatively limited thus far, deterioration may exaggerate if Europe falls into a moderate recession. On the positive side, high-yielding fixed-rate receivables, such as consumer loan receivables, are expected to mitigate the negative effect of excess spread being compressed by rising interest rates in new transactions. DBRS Morningstar considers excess spread compression in its rating analysis.

Overall, DBRS Morningstar considers the credit outlook for prime portfolios representative of the main jurisdictions, to be stable. However, near-prime and/or non-prime portfolios may see over-proportional performance deterioration, hence DBRS Morningstar's negative outlook. Although near-prime and non-prime portfolios may see their expected loss parameters revised when performance deteriorates available, ratings may not be affected thanks to mitigating factors such as deteriorating starting from a low level, deleveraging and termination/shortening of investment periods. Hence, DBRS Morningstar has stable outlook for its credit ratings.

Thanks to their defining payment mechanism, Italian salary assignment loans (SALs) are resilient to inflationary pressure and compression of disposable income. SALs also show lower credit delinquencies and losses due to the mandatory insurance guarantee that accompanies them. All in all, DBRS Morningstar does not expect performance deterioration (if any) to overly affect rating stability in any of the three consumer loan sectors.

Asset Notes		**Structural Notes**	
Positive	**Negative**	**Positive**	**Negative**
• ABS securitised portfolios mostly only comprise fixed rate receivables, which are not directly affected by rising interest rates • Since the pandemic, credit performance has remained largely stable, with only modest increases in arrears • Receivables contractual interest rates are higher than for secured loans, reducing the impact of spread compression (if any)	• The product is typically unsecured, and the performance is more susceptible to macroeconomic challenges • Inflation may cause a further increase in arrears • Unemployment may rise in 2023, with a negative impact on performance • Portfolios with exposure to more financially vulnerable borrowers are more exposed to the negative effects of high inflations and/or macroeconomic weakness.	• Fixed rate liability structures do not require hedging with derivatives; such structures are common for retained consumer loans deals • There is more excess spread available in the interest revenues to offset losses • Senior notes in fully sequential structures are expected to be more protected against performance deterioration • The compression of transaction excess spread (while negative in itself) could accelerate the breach of triggers based on it commonly seen in structures with pro rata amortisation mechanisms. This, would lead to a sequential redemption, positive for the senior noteholders	• Higher interest rates and higher senior costs (e.g., hedging costs) will reduce the excess spread while the originators adjust to the interest rate changes • Non-sequential amortisation in some structures expose senior noteholders to performance deterioration to a larger extent • The compression of transaction excess spread, while negative in itself, could accelerate the breach of a PDL-related trigger. This is commonly negative for non-senior noteholders but positive for senior noteholders

Credit Cards and Revolving Lines of Credit

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2023 Credit Outlook
Negative

Overall, the current economic environment is expected to affect credit cards and flexible drawing products more negatively than other consumer loans. DBRS Morningstar also expects a moderate shift from transactional use of these products towards a revolving nature. Higher interest charges payable by revolvers may only partially offset the negative effect of lower payment rates.

Fast rising interest rates may also negatively affect existing structures without (explicit) hedging in place: in fact, adjustment of account contractual rates could be slow and limited by regulatory regimes (including the right of account holders to reject the new rates). The response to negative economic changes may vary between prime, near-prime and non-prime portfolios, with more marked performance deterioration in non-prime portfolios and prime pools possibly remaining virtually unaffected. Portfolio and structural elements of credit card and revolving lines of credit ABS transactions could result in some downward rating pressure for unhedged non-prime transactions that rely on excess spread as credit enhancement.

Asset Notes		Structural Notes	
Positive	**Negative**	**Positive**	**Negative**
• In some jurisdictions, receivables are allowed to be charged high interest rates commensurate with the credit risk • Inflation and compression of household disposable income are expected to encourage more revolving behaviour without causing immediate payment defaults	• The product is considered the most susceptible to macroeconomic changes due to the flexible payment options • Charge-offs during the pandemic showed some temporary spikes as financially vulnerable borrowers defaulted • The behavioral shift from transactors to revolvers decreases payment rates and exposes the portfolios to a longer repayment horizon with potentially higher credit losses • Unemployment may rise in 2023 with a negative impact on non-prime and near-prime portfolios	• There is typically considerable excess available in the interest revenues to offset losses • Transactions usually amortise on a sequential basis with better protection for senior noteholders	• Unhedged structures are exposed to a reduction of excess spread due to the lagged adjustment of the collateral yield (if permitted under the legislation) and/or to the borrowers' right to reject the new charges • A decrease in payment rates will expose the transaction to longer tail risks (e.g., slower deleveraging), and to a longer repayment horizon with potentially higher credit losses. The impact is more prominent for subordinated tranches

Autos

2023 Credit Outlook

Stable

The sector remains characterised by strong credit performance with low arrears and default levels persisting for the time being. However, auto ABS portfolios are now exposed, due to their low fixed rate yield in the face of rising interest rates and reductions in portfolio sizes. Residual value (RV) risk has been kept in check over the last two years due to the impact of rising vehicle prices, but this is expected to evolve as vehicle price increases soften. Overall, DBRS Morningstar expects ratings to remain stable.

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Pool Notes		Structural Notes	
Positive	**Negative**	**Positive**	**Negative**
• Securitised portfolios mostly comprise fixed rate receivables, whose performance is not directly affected by rising interest rates • Despite an increase in arrears, credit performance remains stable and within expectations • The sector continues to demonstrate robust credit performance reflecting its customer base, with a relatively low sensitivity to macroeconomic changes • Used vehicle prices have performed well, supporting recoveries and equity positions for obligors	• Unemployment may rise in 2023 with a negative impact on consumer credit performance and a reduced appetite for new car financing • The sector response to rising unemployment may not be uniform: with more marked impact on non-captive, near-prime or non-prime pools • Existing receivables pay comparably low nominal interest rates • Higher interest charges driven by higher funding costs are likely to disincentivise potential cash buyers who have previously sought to use vehicle finance at limited cost to benefit from ancillary product offerings • Portfolio sizes may decline due to the combined effect of reduced new vehicle availability and affordability/credit factors • Higher vehicle prices may lead to more aggressive RV setting policies	• Structures are usually fully hedged • Fully sequential structures are expected to be more prevalent; for existing transactions sequential repayment shields senior noteholders from performance deterioration	• Very low excess spread available for prime transactions • Transactions with pro-rata features expose senior noteholders to performance deterioration to a larger extent • Higher liability costs and senior expenses (including hedging costs) may eliminate excess spread whist new originations adjust to the interest rate environment

CMBS

The following table details our expectations for the year across each of the main European CMBS property types. Considering the sector's sensitivity to interest rates in terms of refinancing risk and property values and the maturity or hedge reset profile of securitised loans, the credit outlook is particularly negative for the office and retail loans, for which we also have an on balance negative credit ratings outlook. Please also see *European CMBS 2023 Outlook* for more details.

Office

2023 Credit Outlook **Negative**

Prime office locations continue to be resilient, with stable vacancy rates at around 7.8% and headline rents pushing higher. In most tier-one cities, prime office rents hit new records in H1 2022, owing to low prime supply and the ongoing rebound in leasing activity since the coronavirus pandemic.

The picture is more negative for secondary offices as a two-speed market takes hold. Vacancy rates in poor-quality offices and in weaker locations are increasing as occupiers cut costs and reduce inefficient space. The existence of 'grey space' is sizeable in poorer-quality offices. Tenants will continue to shed excess floorspace in properties that do not meet corporate environmental and social requirements and will therefore as a whole occupy fewer higher-quality offices.

Retail

2023 Credit Outlook **Negative**

Retail markets have come under renewed pressure as consumers are feeling more negative now than at any time on record in most European economies. Higher interest rates, falling real household incomes, and the war in Ukraine are all weighing on consumer confidence. Higher unemployment is anticipated in 2023, meaning that consumers will prioritise essential spending and cut back heavily on discretionary items, such as fashion, consumer electronics, and home furnishings. In this context, tenant defaults will likely rise and retail rents will likely decline further. Supermarkets and convenience-based retailers will be more resilient, but they are not immune to recession.

Industrial

2023 Credit Outlook **Stable**

The logistics market is likely to feel the effects of recession, although the message from asset managers is that there is no sign of reduced demand – yet. While rising interest rates and higher debt costs have pressured yields, continued rental growth or indexation in lease contracts has offset some of the yield impact. As a result, capital values have been more resilient than expected so far. Prime logistics rents increased by an average of 5.0% in H1 2022 and by as much as 10.0% in Belgium, 9.0% in France, 8.0% in Germany, and 6.5% in the Netherlands. So far, most tenants have been able to absorb the full extent of rent indexation to CPI in their lease terms, with only a few looking to negotiate fresh terms.

We expect logistics rents to remain resilient as structural demand drivers offset some of the macroeconomic weakness. Furthermore, prime rents in Europe are often set during the pre-letting of new schemes, so higher construction costs and development finance rates will need to be passed on to tenants. This will mean higher asking rents if developers are to retain profitability.

Multifamily

2023 Credit Outlook **Stable**

The situation for residential occupier markets is mixed. While vacancy rates remain very low, tenants are facing pressure from higher inflation and the knock-on effect of indexation in their lease terms. Many jurisdictions are introducing rent regulation in response to this trend—most notably in Denmark, France, Scotland, and Spain—with varying effects on rental levels. We believe that the significant rise in mortgage rates and other difficulties in the mortgaged housing market will make renting the increasingly preferred option, which supports the demand side of the residential sector.

On the supply side, there are depressed levels of housing starts across Europe and we expect the housing shortage to continue for the long term. In Germany, the latest data to July 2022 showed a 2.1% decline in housing permits, although permits for multifamily schemes increased. However, with rising construction costs and debt financing becoming increasingly expensive, we do not expect these permits to be fully developed in the next few years. Limited supply should also remain a positive driver of occupancy rates.

Hospitality

2023 Credit Outlook **Stable**

The lodging industry's recovery continued to accelerate in the first nine months of 2022, despite increasing global economic uncertainty and deep labour shortages across travel and tourism. Year over year (YOY), hotel occupancy and the average daily rate (ADR) across all major European countries grew, supported by strong domestic and emerging international travel demand. Urban markets are experiencing greater momentum in their recovery as more employees return to the office and leisure travellers return to restaurants and live entertainment venues.

European CMBS Sector Considerations

	Pool Notes		Structural Notes	
	Positive	**Negative**	**Positive**	**Negative**
European Single-Asset Single-Borrower (SASB) CMBS	• Initial loan leverage is still relatively moderate compared with before the great financial crisis (GFC). • Inflationary pressure is expected to push rental income higher, to some extent offsetting the increase of valuation yields. • To hedge against increases in the interest payable under the loan due to fluctuations in Euribor or Sonia, the floating-rate loans are normally hedged with interest rate cap agreements. • The vast majority of loans benefitted from strong sponsorship during the coronavirus pandemic, with sponsors ready to support transactions when required.	• Rising interest rates increase borrowers' debt costs, which translates into lower debt service coverage levels at hedge maturity and/or higher default risk at loan maturity. • Long-term interest rates largely determine CRE valuation yields. As a result, the likely increase of valuation yields in line with interest rates should drive the value of CRE assets downward, translating into higher risk of default at loan maturity. • Mezzanine or subordinated loans increase the overall leverage. • According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, we expect negative economic growth in 2023 for some of the largest European economies, including the UK (-1.0%), Germany (-0.6%), and Italy (-0.1%).	• Liquidity reserves can cover potential interest shortfalls. • Principal waterfall typically switches to sequential pay upon adverse loan event. • Payments to Class X notes are switched off following the occurrence of certain credit events.	• For interest rate cap agreements expiring before loan maturity or on loan extension date, in a raising interest rate environment, it may become expensive to purchase new agreements. • Cash trap mechanisms in the most recent loans are significantly weaker than standard CRE loans, with the sponsor holding the signing right of the cash trap account until an event of default. • There is a lack of default financial covenants.

	Pool Notes		Structural Notes	
	Positive	**Negative**	**Positive**	**Negative**
European Concentrated Multi-borrowers CMBS	• There are more diversified pools with several asset types and different sponsors. • Initial loan leverage is still relatively moderate compared with before the GFC. • Inflationary pressure is expected to increase rental income as well, to some extent offsetting increasing valuation yields. • To hedge against increases in the interest payable under the loan due to fluctuations in Euribor or Sonia, CRE floating-rate loans are normally hedged with interest rate cap agreements.	• Multi-borrower portfolios have generally lower asset quality compared with single-borrower portfolios, with many value-add assets in need of repositioning or full refurbishment. • Rising interest rates increase borrowers' debt costs, which translates into lower debt service coverage levels at hedge maturity and/or higher default risk at loan maturity. • Long-term interest rates largely determine CRE valuation yields. As a result, the likely increase of valuation yields in line with interest rates should drive the value of CRE assets downward. • Mezzanine or subordinated loans increase the overall leverage. • According to DBRS Morningstar's recently published Baseline	• Liquidity reserves can cover potential interest shortfalls. • The controlling class is typically the first loss class, which promotes longer liquidations and potential for asset value recovery. • Principal waterfall typically switches to sequential pay upon first adverse loan event. • Substantial principal sequential allocation mitigates negative pooling risk. • Payments to Class X notes are switched off following the occurrence of certain credit events.	• Re- or prepayment principal proceeds of stronger loans allocated (modified) pro-rata to the notes makes senior notes more susceptible to potential credit deterioration of weaker loans. • Relatively weaker sequential triggers in more recent transactions. • Pari passu pieces may be participated in various transactions and/or held by various investors. • For interest rate cap agreements expiring before loan maturity or on loan extension date, in a raising interest rate environment, it may become expensive to purchase new agreements.

		Macroeconomic Scenarios, we expect negative economic growth in 2023 for some of the largest European economies, including the UK (-1.0%), Germany (-0.6%), and Italy (-0.1%).		
European Granular CMBS	**Pool Notes**		**Structural Notes**	
	Positive	**Negative**	**Positive**	**Negative**
	• Pools have significant diversification in terms of property types and locations. • Some portfolios consist of long term, fully amortising loans. • Some portfolios consist of fixed rate or fully hedged floating rate loans, mitigating the effect of interest rate increases.	• May include shorter-term debt, which is likely to increase the transaction's refinancing risk. • The borrower/lender faces ongoing future funding obligations to complete and meet the business plan. • Rising interest rates increase borrowers' debt costs, which translates into lower debt service coverage levels at hedge maturity and/or higher default risk at loan maturity. • The loans included in these transactions are normally backed by more challenging, transitional types of CRE assets. • Relatively lower sponsor quality than in European SASB and concentrated multi-borrower CMBS. • Long-term interest rates largely determine CRE valuation yields. As a result, the likely increase of valuation yields in line with interest rates should drive the value of CRE assets downward. • According to DBRS Morningstar's recently published Baseline Macroeconomic Scenarios, we expect negative economic growth in 2023 for some of the largest European economies, including the UK (-1.0%), Germany (-0.6%), and Italy (-0.1%).	• The sponsor typically retains a large portion of the first-loss notes, with significant risk retention. • The operating adviser (or collateral manager) from day one is entitled to certain modification rights with respect to the collateral but also to extensive consultation rights for material actions. • Note protection tests exist, which are financial covenants that, if breached, cut off distributions to the equity and set off alarm bells, signifying distress. • Some transactions are sequential from day-one, following the typical European RMBS structure. • Some transactions benefit from considerable excess spread.	• Re- or prepayment principal proceeds of stronger loans allocated (modified) pro-rata to the notes makes senior notes more susceptible to potential credit deterioration of weaker loans. • Pari passu pieces may be participated in various transactions and/or held by various investors. • Deal documents and investor reporting are less standardised.

Structured Credit

The significant headwinds of inflation, monetary tightening, a looming recession, and geopolitical concerns will likely lead to credit deterioration for the underlying corporate and SME borrowers in structured credit transactions. Indeed, this year looks set to become a challenging one for the European corporate sector as a whole and appears to be exacerbated by a deterioration of access to funding in the SME sector.

The following table provides further detail on our expectations for the year across each of the European structured credit sectors. Please also see *European Structured Credit 2023 Outlook* for more details.

Sector	2023 Credit Outlook	Asset arrears/defaults	2023 Ratings Outlook
BSL CLOs	Negative	Moderate deterioration	Stable
SME CLOs	Negative	Moderate deterioration	Stable

BSL CLOs

2023 Credit Outlook
Negative

We expect credit fundamentals in this sector to deteriorate in 2023 because of the credit squeeze caused by inflation, higher interest rates, and the potential recession in most European countries. Defaults on underlying leveraged loan borrowers will likely rise in 2023, given the impact of higher borrowing costs, higher input prices, and lower expected consumer spending.

Pool Notes		Structural Notes	
Positive	**Negative**	**Positive**	**Negative**
• Current leveraged loan (LL) delinquency levels remain close to historical lows. • A significant percentage of borrowers do not need to fund in the current environment. • Pan-European diversification makes CLOs more regionally diversified than other European securitisations.	• Borrowing costs are rising as a consequence of interest rate increases, which will likely affect margins. • Inflation will likely squeeze margins further. • A recession would affect sales and profitability. • Credit deterioration risks are likely to lead to increased loan credit rating downgrades and defaults. • Realised recoveries may deteriorate due to the less favourable environment and increased prevalence of covenant-lite loans.	• BSL CLO structural mechanisms, such as overcollateralisation (OC)/interest coverage (IC) triggers will likely protect senior notes from credit quality deterioration. • The current environment may give managers opportunities to buy good-quality assets at discounted values and build up par. • Pre-March 2022, CLOs benefitted from low weighted average cost of capital (WACC), which allows them higher flexibility to buy up on the credit spectrum but still maintain good yield.	• Post-March 2022, CLOs will have significantly higher WACC, making them more sensitive to loan pricing movements. • CLOs that are past their reinvestment period will not be able to benefit from active management and diversify away from riskier sectors, which may cause concerns for the most junior notes. • There is a risk of triggering OC/IC tests due to expected loan downgrades and CCC-bucket limit breaches.

SME CLOs

2023 Credit Outlook
Negative

European SMEs face challenges on several fronts which could, if combined, cause significant disruption. The key macro themes from 2022 carrying over to 2023 are the same as those affecting LL borrowers in BSL CLOs, namely: inflation; geopolitical issues, particularly the war in Ukraine that has caused an energy crisis and severely affected Europe; and monetary tightening. European SMEs also face difficulties in accessing financing.

Pool Notes		Structural Notes	
Positive	**Negative**	**Positive**	**Negative**
• Many SMEs have been proactive, benefitting from government guarantee loans at favourable terms. • Originators tightening lending credit standards could offset expected credit quality deterioration. • Securitised loans have outperformed historical base case default assumptions, hence start the potential downturn from a low base.	• Inflation is likely to cause significant margin compression to many SMEs as most are price takers and may not have the ability to increase their product prices, leading to a margin squeeze. • Funding cost increases will cause further deterioration in SME profitability. • Insolvencies expected to rise in 2023 because of tighter profit margins, a potential recession, and a rundown of coronavirus-related incentives and support measures. • The end of moratoria on bankruptcy proceedings is already leading to increased default rates as the backlog of insolvency cases get processed. • The funding gap for SMEs is likely to rise.	• SME CLO performance has been better than expected over last few years. • Static SME CLOs and SME CLOs past their reinvestment period are likely to withstand moderate increases in portfolio delinquency and default deterioration due to the impact of short weighted-average life (WAL) and quick transaction deleveraging in sequential-pay structures. • SME CLOs ratings proved resilient even during the coronavirus pandemic during which we applied adjustments to expected performance in our analysis.	• SME CLOs still in the reinvestment period are more at risk of downgrades if pool deterioration accelerates. • Junior and mezzanine tranches more likely to be downgraded if loan defaults rise. • In some transactions, unhedged interest exposure (fixed-rate loans versus floating-rate bonds), basis risk (different floating-rate benchmarks), and/or rate reset dates reduce excess spread available as credit enhancement.

NPLs

Barring a few exceptions, the performance of European NPL transactions issued prior to the outbreak of the coronavirus 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.

The following table details our expectations for the year across each of the European NPL jurisdictions. Please also see *European NPLs 2023 Credit Outlook* for more details.

Jurisdiction	NPL 2023 Credit Outlook	2023 Ratings Outlook
Cyprus	Stable	Stable
Ireland	Stable	Stable
Italy	Negative	Negative
Portugal	Stable	Stable
Spain	Negative	Stable
UK	Stable	Stable

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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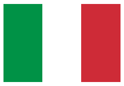
2023 Credit Outlook
Irish NPL Credit Outlook: Stable

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		Structural Notes	
Positive	Negative	Positive	Negative
• **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	• **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	• **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	• **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.	



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.

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	• **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 CRE, including land. Increased interest rates are expected to cause a downward adjustment in real estate values, with relatively higher adjustments anticipated for the CRE 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.	• **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	• **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

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 release of NGEU resources to Italy and commitment to the NRRP.

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.
- **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.

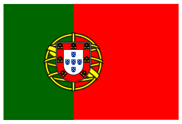
underperformance (measured against the initial business plan recovery expectations), some of the servicer fees are deferred and paid junior to the senior notes. For transactions issued post the 2019 GACS amendment, the subordination trigger is based on the CCR, which engages quicker compared to the NPV 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 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.

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

- 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).



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 business plan) exceeded so far initial expectations in most of the segments except for one transaction.

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 rising interest rates on property prices.

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 prices in legal auctions against opportunistic offers.

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.

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.

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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 BOE'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 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.

Covered Bonds

We expect the performance of mortgage loans in cover pools (CPs) to be weaker in 2023 due to rising interest rates and high inflation, which will erode the capacity of mortgage borrowers to repay their commitments (see also RMBS and CMBS sections). However, CB programmes will continue to perform robustly, mainly because of the dual-recourse nature of the product and the new measures adopted in some countries following the transposition of the European Commission's CB Directive (the Directive), such as the liquidity buffer covering 180 days of net liquidity outflows on the covered bonds. Furthermore, asset coverage tests in CB programmes incentivise issuers to replace poorly performing collateral.

All EU countries have already transposed the CB Directive, but some issuers have not updated their CB programmes to comply with it yet.

The following table details our expectations for the year across each of the European CB jurisdictions. Please see *European Covered Bonds 2023 Outlook* for more details.

Sector	2023 Credit Outlook	2023 Ratings Outlook
Spain	Stable	Stable
Germany	Stable	Stable
Italy	Stable	Stable
Portugal	Stable	Positive
Greece	Stable	Stable
Nordics	Stable	
Other Countries	Stable	

Spain

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2023 Credit Outlook

Stable

After the law transposing the CB Directive entered into force in Spain in July 2022, Spanish issuers have tried to protect their CB programmes from any negative impact. While OC levels fell, which was to be expected, issuers chose to maintain OC at much higher levels than the minimum required by law. Other factors in DBRS Morningstar's ratings analysis remained neutral or positive under the new law, which led to positive rating actions in 2022. Most loans in the CPs have a floating rate of interest, so increasing interest rates and high inflation will erode the capacity of borrowers to service their mortgages. However, Spanish CB programmes are well positioned to deal with some level of asset deterioration. Furthermore, the still high OC levels that issuers maintain in their programmes will continue to play an important role in the performance of CB ratings.

Macroeconomic Scenario	CB Directive	Credit Risk	Other features
Negative • GDP growth will decelerate in 2023 (0.9% vs 4.6% in 2022), similar to most European countries. • High levels of inflation and interest rates will continue to put pressure on households' disposable income. • The unemployment rate is expected to rise slightly, although it will remain relatively low compared to the Spanish historical average.	**Negative** • We expect OC levels to decrease as issuers optimise their programmes. • Legal uncertainty on specific topics will still remain until additional laws or guidelines are published.	**Negative** • Rising mortgage rates and unemployment rates will lead to some increase in arrears and defaults. • CB Programmes lack derivatives to hedge against interest rate risk.	**Negative** • Stricter eligibility criteria reduce the amount of collateral for covered bonds.
Positive • Supportive government measures like the ones approved by the Spanish Government on 24 November 2022 will help the most vulnerable borrowers.	**Positive** • OC levels will continue to be high, far above the legal minimum. • Percentage of non-residential loans will continue to fall, and will represent a lower share of the CPs.	**Positive** • We expect issuers to replace defaulted loans with performing loans or register prime new loans to maintain CP quality.	**Positive** • We expect that issuers will continue to support their CB programmes. • Investors' perception of Spanish CB will further improve, now that the product is aligned with other European CBs. • We expect soft-bullet structures to emerge as substitutes for hard-bullet ones in 2023, despite the legal uncertainty on the liquidity to be maintained for these structures.

Germany

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2023 Credit Outlook

Stable

Most loans in German CPs have a fixed rate of interest, so increasing interest rates do not have an immediate impact on existing loans in the pool. We may see some increase in arrears levels, albeit from a very low level. German CBs tend to be floating rate - resulting in a mismatch between assets and liabilities, especially in this rising rate environment. Unless this mismatch is hedged, the level of OC commensurate with the CB rating (pass-OC) is likely to increase materially in the shorter term. In the medium-term, while some loans yielding low interest will mature and others will reset to a higher interest rate, DBRS Morningstar expects issuers will add newly originated loans with higher interest rates to the CP, increasing excess spread again. The high OC levels that issuers of DBRS Morningstar-rated German CB programmes maintain will play an important role in the performance of CB ratings.

The updated Pfandbrief law transposing the CB Directive into German law, which entered into force in July 2021 and saw further updates last year, introduced a new paragraph on derivative transactions that are eligible regarding the CP, with some positive features such as the need to frequently check them for their compliance with Pfandbrief law. However, we do not expect German issuers to introduce hedging into DBRS Morningstar-rated CB programmes.

Macroeconomic Scenario	CB Directive	Credit Risk	Other features
Negative • GDP is expected to contract by 0.6% in 2023 vs 1.7% growth in 2022. • High levels of inflation will continue to put pressure on households' disposable income. • The unemployment rate is expected to increase slightly.		**Negative** • Rising interest rates will stretch affordability of new buyers and mortgage borrowers will face rate resets. • Performance of mortgage loans is expected to slightly worsen in 2023. • CB Programmes lack derivatives to hedge against interest rate risk.	**Negative** • Banks will have less room to maneuver for issuing CBs due to higher pass-OC levels.
Positive • The government has more fiscal headroom than most other European peers to support the economy and households. • The unemployment rate will remain at a low level.	**Positive** • Introduction of maturity extensions. • Increase of the legal minimum nominal OC from 0% to 2% (5% for shipping and aircraft), which must not be the same loans used for the 2% minimum net present value (NPV) OC. • OC levels will continue to be high, above the legal minimum.	**Positive** • Increasing interest rates will not impact most borrowers in 2023 given the fixed-rate nature of mortgage loans. • Issuers typically replace defaulted loans with performing loans and maintain CP quality. • Issuers have option to increase OC levels to offset impact of fixed-floating mismatch.	**Positive** • We expect the support from the issuers to their CB programmes will remain.

Italy

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2023 Credit Outlook

Stable

The law transposing the CB Directive in Italy was approved in October 2021 and entered into force in July 2022. However, the Italian framework still lacks (as of the date of publication) the implementing provisions by Bank of Italy as designated regulator.

Overall, the standardisation imposed by the new European framework is viewed positively by DBRS Morningstar for Italian CBs, with particular reference to the liquidity support requirement (180 days) and the minimum level of OC required to comply with Article. 129 of the Capital Requirements Regulation (CRR), although most of the Italian programmes already satisfied these minimum requirements.

However, the uncertainty surrounding the absence of implementation of some provisions has somewhat hampered activity in the Italian market: specifically, just 15.6% of Italian market CB distributed issuance in 2022 occurred after 8 July, the date when the new European framework became effective.

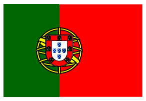
In January 2023 Bank of Italy started a public consultation (ending on February 11th) on the amendment to its current instructions on Italian CBs (contained in Bank of Italy circular 285/2013), in order to fully implement the new European framework. The new instructions will focus on the assessment of the cover pool assets, the criteria for the inclusion of hedging agreements in the cover pool, the requirements for the cover pool monitor, the calculation of the level of overcollateralisation and the possibility to reduce its minimum level (pursuant to art. 129 of CRR) from 5% up to 2%.

Compared with other Eurozone countries, Italy has seen only a moderate growth in CB distributed issuances over the last year. DBRS Morningstar expects that the volume of issuances in 2023 will be positively affected by postponed H2 2022 deals, once the regulator releases implementation provisions and instructions.

One sustainable (green) CB was placed out of Italy in 2022: the proportion of sustainable CBs relative to total issuance in the Italian market is similar to that observed in 2021 (just above 10%), and we expect sustainable issuance to continue at a moderate pace in 2023.

Macroeconomic Scenario	CB Directive	Credit Risk
Negative • GDP growth will decelerate in 2023, as in most European countries, with Italy projected to have negative growth of -0.1%. • High levels of inflation will continue to put pressure on households' disposable income. • Increasing interest rates will further reduce disposable incomes. • Unemployment rate is expected to climb to 8.5% in 2023 from 8.1% (expected for 2022).	**Negative** • Lack of implementing provisions by the regulator.	**Negative** • High interest rates are detrimental for the performance of floating-rate loans. • Some CB programmes lack derivatives to hedge against interest rate risk. • Performance of mortgage loans is expected to worsen in 2023 due to higher interest rates and high inflation, affecting the affordability of mortgage debt.
Positive • The debt-to-GDP ratio is expected to decline to around 145.4% in 2022, from 150.3% in 2021.	**Positive** • Introduction of minimum 180-day liquidity reserve. • OC levels will continue to surpass the legal minimum, especially as "European Covered Bond (Premium)" CBs require compliance with Article 129 CRR (5% minimum OC [1]).	**Positive** • Continued support provided by CB issuers to their programmes.

1. Or lower level established by the country's regulator, not lower than 2%.



Portugal

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2023 Credit Outlook
Positive

The law transposing the CB Directive entered into force in Portugal in July 2022. However, the new law does not automatically apply to Portuguese CBs outstanding as of July 2022 and outstanding CBs under the previous law may be tapped until 8 July 2024, subject to certain conditions. For the new CB law to apply the issuer must seek approval from the Securities Market Commission (CMVM) to convert the CB programme to the new law. Alternatively, a new CB programme may be set up under the new law. As at the time of publication, no programme has been converted to the new law and no new programme has been set up. However, DBRS Morningstar expects some conversions in 2023.

DBRS Morningstar considers that the introduction of a six-month liquidity reserve and the removal of any issuer discretion around maturity extensions could be credit positive for some Portuguese CB programmes that convert to the new law.

Macroeconomic scenario	CB directive	Credit Risk	Other features
Negative • GDP growth will decelerate in 2023, as in most European countries, to around 0.5% from 6.3% in 2022. • High levels of inflation will continue to put pressure on households' disposable income. • Increasing interest rates will further reduce disposable incomes.	**Negative** • Legal minimum OC decreased to 0% from 5.26%, although issuers need to maintain 5% OC to receive the "European Covered Bond (Premium)" label treatment.	**Negative** • High interest rates (IR) are detrimental to the performance of floating-rate loans, a majority in the CPs. • Some CB Programmes lack derivatives to hedge against interest rate risk. • Performance of mortgage loans is expected to worsen in 2023 due to interest rates and high inflation.	**Negative** • The updated law does not automatically apply to Portuguese CBs. Issuers must apply to the CMVM for conversion of their programmes. •
Positive • Although the unemployment rate is expected to modestly increase, it is expected to remain low in 2023.	**Positive** • Introduction of minimum 180-day liquidity reserve. • Removal of issuer discretion on maturity extension. • OC levels will continue to be above the legal minimum, especially as "European Covered Bond (Premium)" CBs require compliance with Article 129 CRR (5% minimum OC).	**Positive** • The CB law (old and new) requires issuers to replace loans 90 days+ in arrears and maintain CP quality.	**Positive** • We expect issuers to continue supporting their CB programmes. • Perception of Portuguese CB will improve, now that the product is aligned with other European CBs, especially following the removal of issuer discretion on maturity extensions.

Greece

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2023 Credit Outlook
Stable

As in other EU and EEA countries, Greece has also transposed the CB Directive, with the introduction of the 180-day liquidity buffer being the most relevant update. Although the CB law is now stronger after the update, Greek CB programmes typically have contractual features that are usually stronger than those in the law. Furthermore, as in many other countries, the outstanding CB will continue being governed by the old law, so we will need to wait until issuers convert their existing programmes to comply with the new law.

The Greek CB market mainly comprises soft bullet and CPT structures, and we expect this to continue, although Greek issuers might follow other EU issuers and switch CPT structures into soft-bullet structures.

We do not expect Greek issuers to tap the market in 2023, as there have not been any benchmark CB placements since 2018. Hence, we also do not expect sustainable CB issuance out of Greece for 2023.

Macroeconomic Scenario	CB Directive	Credit Risk	Other features
Negative • GDP growth will decelerate in 2023, as in most European countries, to around 0.6% from 6.0% in 2022. • High levels of inflation and interest rates will continue to put pressure on households' disposable income.	**Negative** • The new law contains provisions that are weaker than the previous legal framework, contractual arrangements, and public commitments for Greek CBs.	**Negative** • High interest rates are detrimental to the performance of floating-rate loans, a majority in the CPs. • CB Programmes lack derivatives to hedge against interest rate risk. • Performance of mortgage loans is expected to worsen in 2023 due to rising interest rates and high inflation.	**Negative** • We do not expect placed issuances in the next year. The last benchmark issuance from Greece was in 2018.
Positive • Unlike in most EU countries, unemployment is expected to slightly decrease by next year.	**Positive** • The 180-day liquidity buffer has been introduced, although Piraeus Bank CB, the DBRS Morningstar-rated CB, already has a liquidity reserve in place as per the programme documentation.	**Positive** • Issuers actively manage the CPs by replacing defaulted loans with performing loans and maintain CP quality.	**Positive** • We expect the support from the issuers to their CB programmes will remain. • Housing market in Greece does not appear to be overheated.

Nordic Countries

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2023 Credit Outlook
Stable

Nordic countries have transposed the CB Directive into their national frameworks. Amongst other features, the liquidity buffer required in the CB Directive has been implemented. However, we do not expect an impact on the CB programmes of these countries given that these frameworks were already strong.

The housing market in all the Nordic countries, apart from Finland, appears to be overheated if we focus on house price growth over the last ten years. Furthermore, inflation in these ten years has been relatively low, except for Norway, which implies that real growth is also high.

As in 2022, we expect the Nordics to continue being important for the green CB market in 2023.

Macroeconomic Scenario	CB Directive	Credit Risk	Other features
Negative • Growth forecasts for 2023 have deteriorated further in recent months, with Finland and Sweden projected to record negative growth. • High levels of inflation and interest rates will continue to put pressure on households' disposable incomes.	**Negative**	**Negative** • High interest rates are detrimental for the performance of floating-rate loans in CP. • Performance of mortgage loans is expected to worsen in 2023 due to high interest rates and inflation.	**Negative** • Housing market appears to be overheated, mainly in Sweden.
Positive • Although expectations for unemployment are deteriorating, current unemployment levels remain low, with Denmark being likely the most negatively affected.	**Positive** • Newly implemented liquidity buffer will support CB programmes.	**Positive** • Issuers typically replace defaulted loans with performing loans and maintain cover pool quality.	**Positive** • Nordic CBs will continue to represent an important market share. • We expect the Nordics to continue tapping the sustainable CB market.

Other Countries

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2023 Credit Outlook

Stable

All EEA countries had transposed the CB Directive by July 2022 but because the regulation is only relevant in the EEA, the UK and Switzerland have not adopted the framework.

Several countries have announced tighter macroprudential measures for the origination of new mortgage loans while house prices continue to rise, mainly in Central and Eastern countries like the Czech Republic and Hungary, and the Baltic countries.

The Netherlands, Slovakia, and Poland placed sustainable benchmark CBs for the first time in 2022, with Dutch issuance experiencing great demand.

Macroeconomic Scenario	CB Directive	Credit Risk	Other features
Negative • Many major economies are expected to experience negative growth in 2023, with the UK economy expected to shrink by 1.0%. • We expect an ongoing context of high inflation and interest rates. Unemployment is expected to increase in the Netherlands and the UK.	**Negative** • CP composition has not varied in countries like Austria, where non-residential loans typically represent an important share of the CPs.	**Negative** • High interest rates are detrimental to the performance of floating-rate loans in the CPs. • Performance of mortgage loans is expected to worsen in 2023 due to higher interest rates and high inflation.	**Negative** • Housing markets in several countries appear to be overheated, with increases of more than 100% in the past ten years.
Positive • Although expectations for unemployment are deteriorating, current unemployment levels remain close to record lows in many of the advanced economies.	**Positive** • Newly implemented liquidity buffer in some countries will support CB programmes. • We expect most issuers to update their CB programmes to comply with the CB Directive, if they have not already done so.	**Positive** • Issuers typically replace defaulted loans with performing loans and maintain CP quality. • Tighter macroprudential measures in countries like Austria will improve credit quality of new mortgage loans.	**Positive** • Issuers in countries like Czech Republic, Estonia, Poland, and Slovakia have successfully tapped the market in 2022, some of them after July, when the CB Directive entered into force. • Several countries have already tapped the green CB market for the first time, and we expect the trend to continue in 2023.

Related Research

Our full sector-specific outlooks are available below:

- *European RMBS 2023 Outlook*
- *European ABS 2023 Outlook*
- *European CMBS 2023 Outlook*
- *European Structured Credit 2023 Outlook*
- *European NPLs 2023 Credit Outlook*
- *European Covered Bonds 2023 Outlook*
- *European Structured Finance 2022 Year in Review*

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