



# European Structured Finance Outlook 2024

Pushing On Through

Jan. 9, 2024

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**S&P Global**  
Ratings

*This report does not constitute a rating action*

# Contents

Credit Performance	4
Issuance	8
RMBS & ABS	13
CLO	29
CMBS	35
Recent Research & Contacts	39

# Key Takeaways



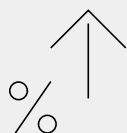
**Consumer:** Inflation has ebbed, policy rates are peaking, and real incomes are beginning to rise again. However, some pressure on collateral performance in consumer-related securitizations will persist, as the new rate environment gradually feeds through to more underlying loan contracts.



**Corporate:** For corporate-backed transactions, credit prospects will remain gloomy in 2024, although we expect only a moderate further rise in the speculative-grade corporate default rate. Commercial real estate will continue to face refinancing risks, although property values may have bottomed out.



**Ratings performance:** Structured finance ratings are weathering the effects of higher prices and interest rates, remaining largely stable through the current period of stress, especially at investment-grade levels.



**Issuance:** European securitization issuance could pick up to €95 billion in 2024, given a larger call pipeline, a recovery in some areas of underlying lending, and rising market engagement from bank originators, after their recent limited activity.



**Lending:** Borrower sentiment and lender risk appetite may both be turning a corner, suggesting that the volume of credit originations that could act as new securitization collateral may begin to recover from current depressed levels in some areas.

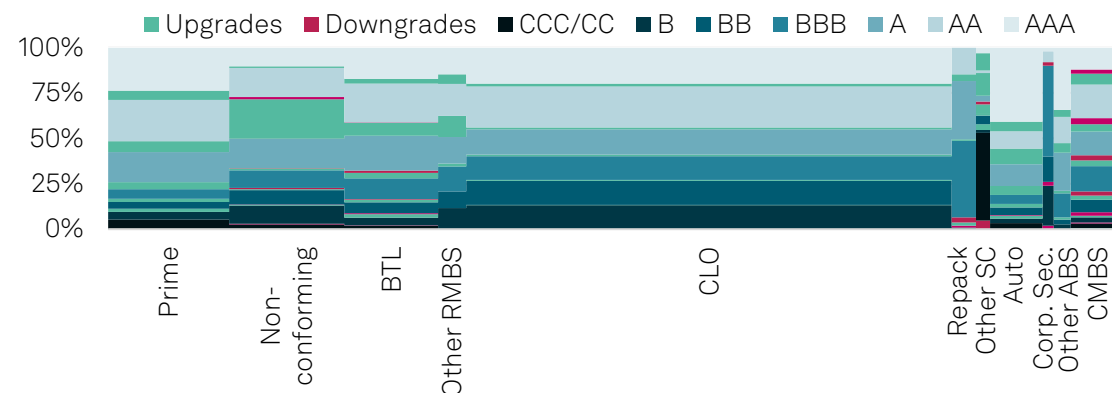


**Bank funding:** The ongoing unwinding of central banks' cheap term funding schemes will likely support more bank-originated securitization supply in 2024, especially in the U.K. Slowing deposit growth may also contribute further to banks' wholesale funding issuance.

# Ratings Remain Resilient, Despite Enduring Credit Pressures

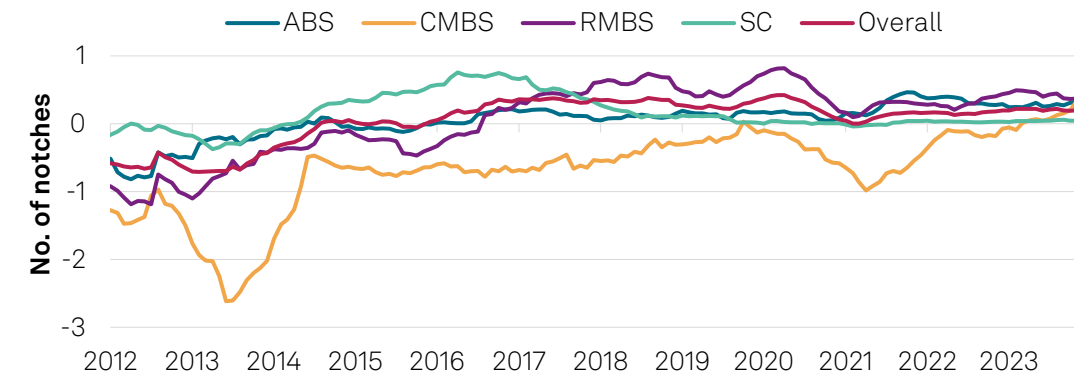
- Elevated interest rates and the high cost of living mean European structured finance performance will remain under pressure in 2024.
- However, the ratings trend has not weakened since the onset of higher inflation and a monetary policy shift starting in early 2022.
- In 2023, we lowered fewer than 2% of our ratings on securitizations in Europe. CMBS transactions backed by office and mixed assets were most affected, but this sector constitutes a small portion of our outstanding European securitization ratings.
- Ratings rose by an average of 0.2 notches in the 12 months to the end of November 2023. For most asset classes, the 12-month trailing average change in credit quality has been positive for several years, indicating aggregate upward rating movements, and even the CMBS sector saw this measure turn positive during 2023.

## Distribution of ratings and 2023 transitions



BTL--Buy-to-let. SC--Structured credit. Excludes confidential ratings. Securities whose ratings migrated to 'NR' over the period are classified based on their rating prior to 'NR'. Source: S&P Global Ratings.

## 12-month average change in credit quality

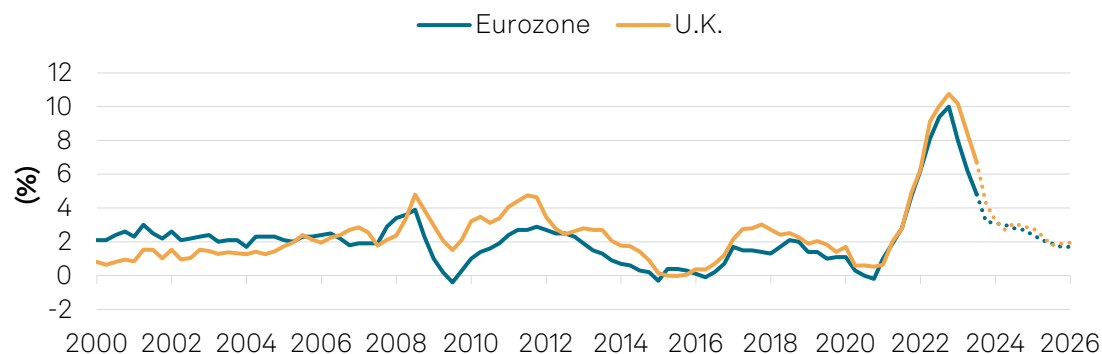


SC--Structured credit, including CLOs. Average change in credit quality is the average number of notches by which ratings changed over a trailing 12-month period. Source: S&P Global Ratings.

# Inflation Ebbs, But Higher Rates Feed Into Consumer-Backed Transactions

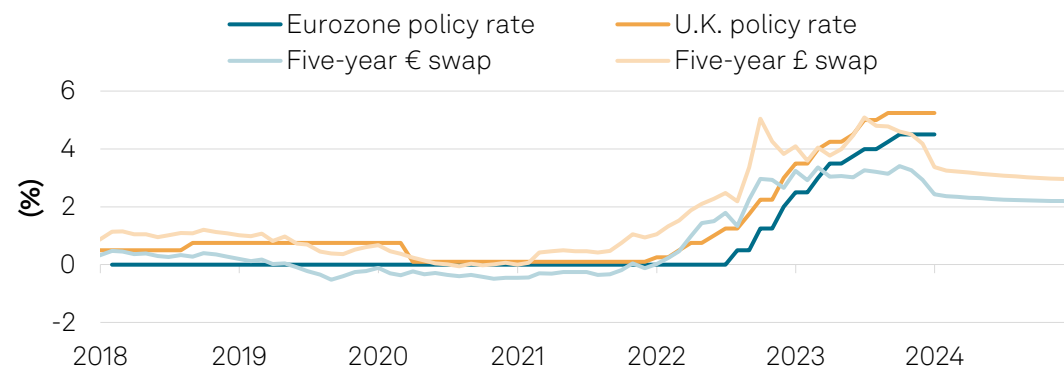
- A soft landing remains the most likely scenario for the European economy. Real incomes are beginning to rise again, thanks to slowing inflation and strong wage growth. We expect the eurozone and U.K. economies to grow by 0.8% and 0.4%, respectively, in 2024.
- Eurozone inflation should average 2.9% in 2024, while wages will rise by 4.0%. In the U.K., inflation has been persistently higher but will moderate to 3.0% and has been countered by higher wage growth than in the eurozone.
- Despite these headline positives, some pressure on credit performance in consumer-related securitizations will persist. While central banks will begin to cut policy rates in 2024, longer-term market rates will likely remain close to recent levels for an extended period. These more restrictive financing conditions will crystallize a payment shock for increasing numbers of underlying borrowers.

## Consumer price inflation



Dotted lines indicate forecast. Source: Eurostat, Office for National Statistics, S&P Global Ratings forecasts.

## Interest rates



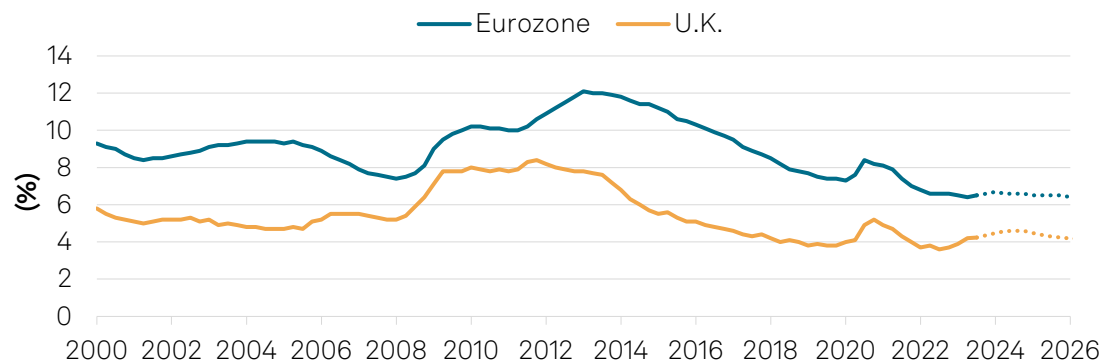
Swap rate series include market-based forward rates to end-2024, as of Dec. 31, 2023. Source: Bank of England, European Central Bank, Bloomberg.



# Continued Labor Market Resilience Will Help To Limit The Credit Impact

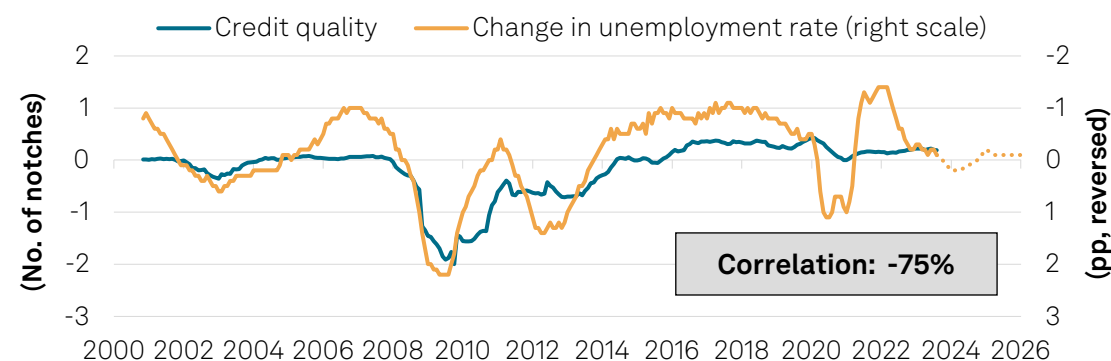
- We expect both eurozone and U.K. unemployment rates to stay contained in 2024, averaging only 6.6% and 4.6%, respectively.
- Labor markets are still tight, for cyclical and structural reasons, and the number of job vacancies is still high, making a sharp rise in unemployment rates unlikely in 2024. For the U.K. in particular, vacancies remain 40% above their long-term average, partly due to Brexit and the pandemic.
- If unemployment were to remain this stable, it would bode well for structured finance ratings migration, despite high interest rates and prices. In the past 20 years, rating movements have shown a 75% negative correlation with unemployment but a limited correlation with interest rates or inflation.

## Unemployment



Dotted lines indicate forecast. Source: Eurostat, Office for National Statistics, S&P Global Ratings.

## Ratings versus unemployment

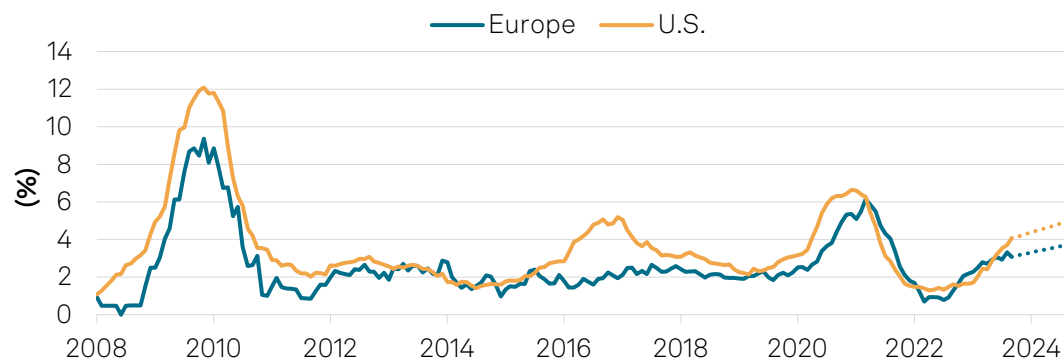


pp--Percentage points. Change in unemployment rate is annual change for the eurozone. Dotted lines indicate forecast. Source: Eurostat, S&P Global Ratings.

# Tighter Financing Conditions Also Squeeze Corporate-Backed Sectors

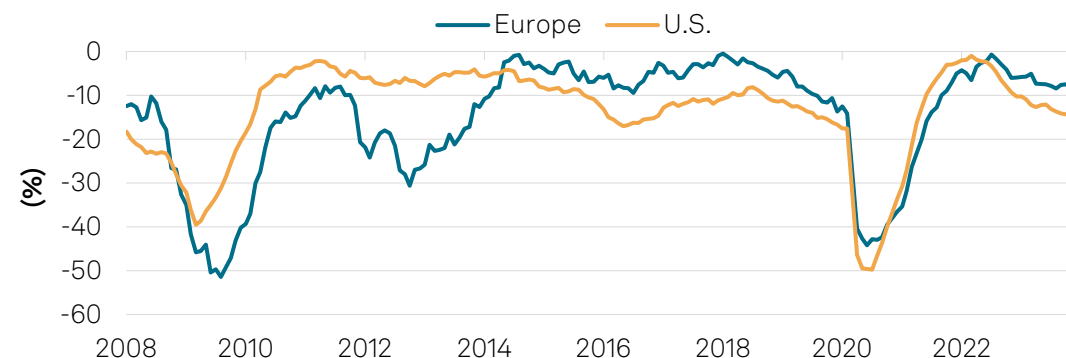
- For corporate-backed transactions, credit prospects will likely continue to worsen in 2024, as debt maturities see lower-rated issuers refinance at much higher rates, straining cash flows. Consumer-facing, chemicals, and capital goods sectors may be most vulnerable.
- We expect a moderate increase in the annualized default rate for speculative-grade corporates to 3.75% by September 2024, though this is still below the most recent peak in 2021 and relatively few of our corporate ratings are on CreditWatch negative.
- Even the 2021 spike in default rates and corporate ratings deterioration had little effect on European CLO ratings, as collateral managers were able to mitigate credit deterioration through trading. Commercial real estate, and therefore CMBS, is also under pressure from higher interest rates, which have raised refinancing risks, although property values may have bottomed out.

## Speculative-grade corporate default rate



Trailing 12-month basis. Dotted lines indicate forecast. Source: S&P Global Ratings.

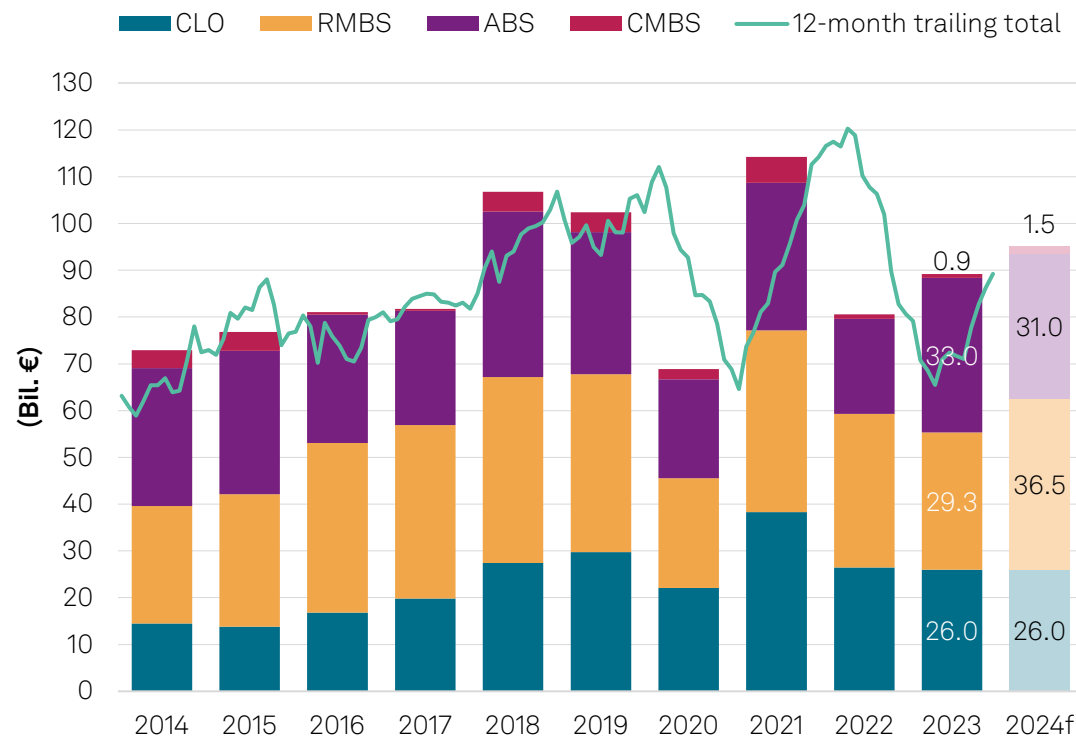
## Speculative-grade corporate net ratings bias



Net ratings bias is the difference between the proportion of ratings with a positive outlook or on CreditWatch positive and the proportion of ratings with a negative outlook or on CreditWatch negative. Source: S&P Global Ratings.

# Refinancing Need And Recovering Credit Origination Will Buoy 2024 Issuance

## European investor-placed securitization issuance



f--Forecast. CLO figures exclude refinancings and resets. Source: S&P Global Ratings.

- After a tepid start to 2023, investor-placed European securitization issuance accelerated in the second half of the year, ending more than 10% up on 2022 volumes, at €89 billion--just above the annual average of the prior decade.
- Issuance could grow further to about €95 billion in 2024, partly due to a larger volume of legacy transactions reaching their call dates and a modest recovery in some areas of underlying credit origination, such as the auto financing that backs most ABS.
- However, bank-originated securitization issuance could be the most systemic source of growth in 2024, having hit a five-year high in 2023. Central bank liquidity schemes that have helped fund financial institutions for many years are in various stages of wind-down, which--together with slowing rates of deposit growth--is likely bringing more bank securitizers back to the market, especially in the U.K.
- Some nonbank originators have likely relied more heavily on warehouse funding over the past 12-24 months, given recurring bouts of market volatility. Greater certainty over spreads and underlying rates could lead to more securitization exits.

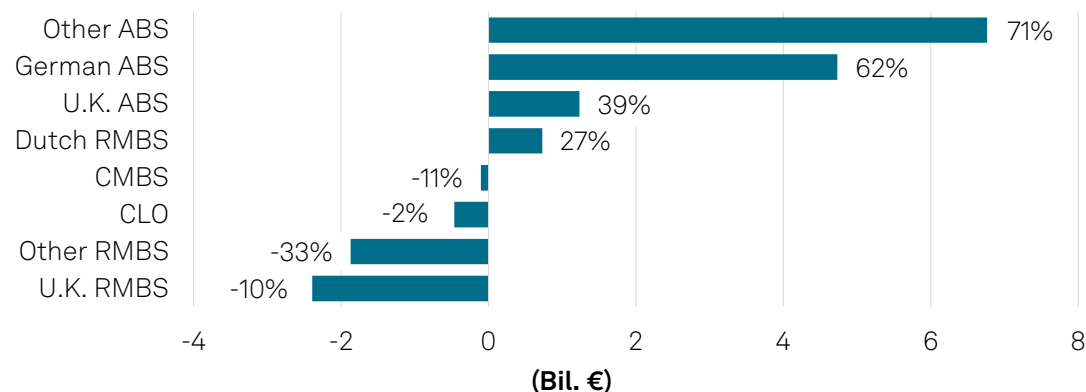


# Sectors Saw Differing Trends In Primary Market Activity, But Diversity Rose

- European securitization sectors experienced mixed fortunes in 2023, as some saw issuance grow strongly while others declined. The two largest sectors did not contribute to volume growth, which generally increased new issuance diversity.
- The strongest growth was in German and Italian auto ABS, with combined volumes more than doubling compared with 2022. Many other jurisdictions also saw a rise in ABS activity, including France, Ireland, the Netherlands, Spain, and Switzerland.
- New CLO issuance was broadly flat, while U.K. RMBS volumes declined substantially, reducing that sector's share of total issuance to less than 25%. That said, this decline was mainly due to the lack of any scheduled refinancings for legacy UK Asset Resolution collateral originated before the financial crisis. These refinancings have previously tended to be large and will return in 2024.

## Change in issuance

2022 to 2023



Data labels show year-on-year growth rate. Based on investor-placed issuance. CLO figures exclude refinancings and resets. Source: S&P Global Ratings.

## 2023 issuance by sector

Total: €89.2 billion

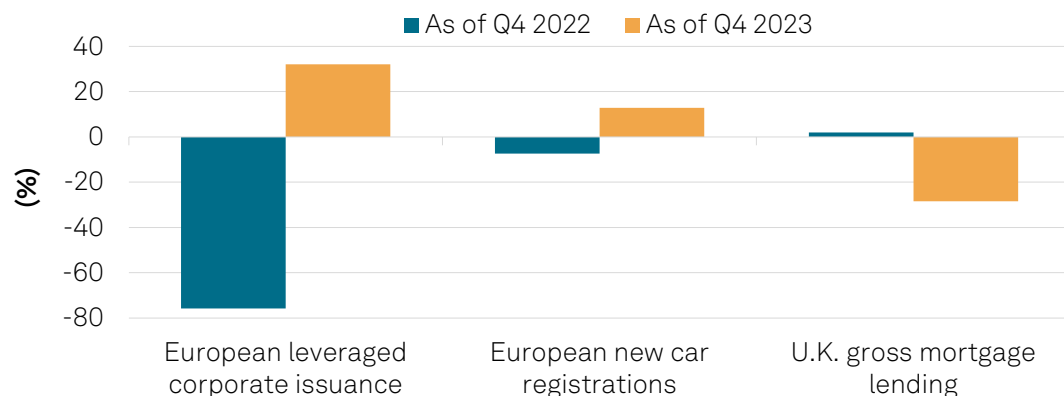


Based on investor-placed issuance. CLO figures exclude refinancings and resets. Source: S&P Global Ratings.

# Underlying Origination Has Bottomed Out For Many Securitizable Assets

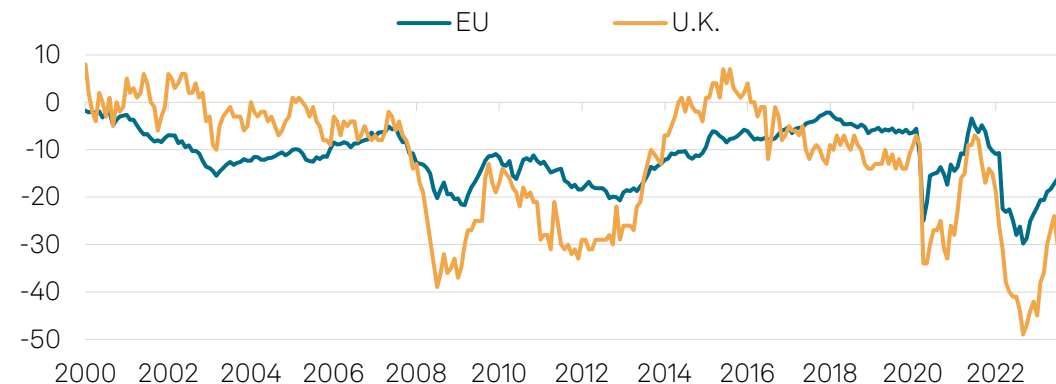
- Securitization issuance is linked to the level of activity in underlying lending markets, especially for nonbank originators. This depends on lenders' appetite for risk and balance sheet expansion, as well as borrower sentiment and willingness to take on leverage.
- In this regard, conditions may have begun to turn around. In some underlying credit markets that are linked to securitization issuance, activity levels may still be depressed by historical standards, but were at least no longer declining over the past 12 months. Leveraged corporate issuance and new car registrations saw double-digit growth, which is likely positive for CLO and auto ABS volumes.
- U.K. mortgage lending is still declining, but consumer confidence in both the U.K. and the EU has bounced back from all-time lows set in 2022, likely due to lower inflation and signs that rates have peaked, suggesting borrowers are more willing to take on new credit.

## Year-on-year change in underlying credit origination



Corporate issuance includes high-yield bonds and institutional leveraged loans. New car registrations based on the five largest European markets. Source: Pitchbook LCD, national auto trade bodies, UK Finance.

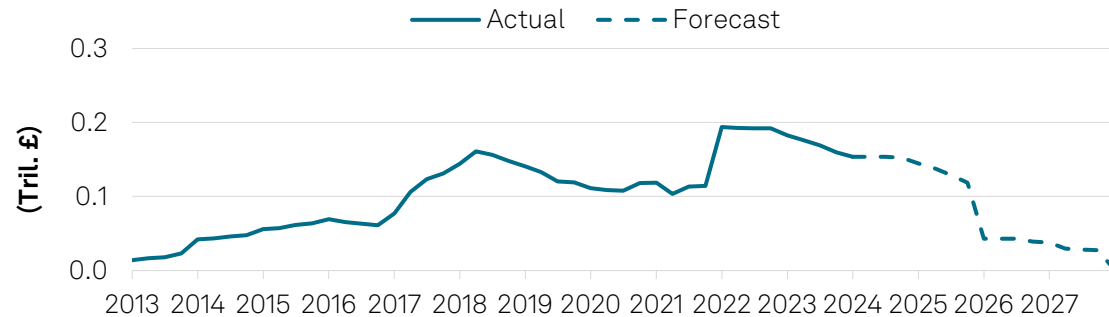
## Consumer confidence



Source: European Commission, GfK NOP.

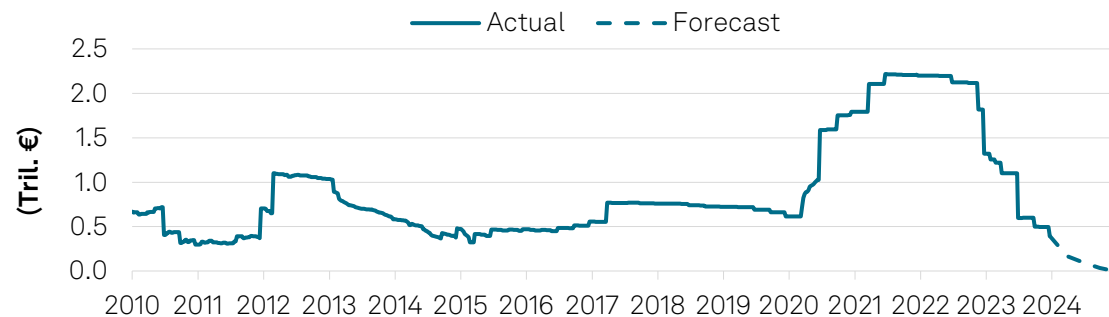
# Lenders' Repayments Of Central Bank Funding Increase Refinancing Needs

## Borrowings outstanding, Bank of England FLS and TFS(ME)



FLS--Funding for Lending Scheme. TFS(ME)--Term Funding Scheme (with additional incentives for small- and mid-sized enterprises). Forecasts assume extensions applied to earliest maturities. Source: Bank of England, S&P Global Ratings.

## Borrowings outstanding, ECB (T)LTROs



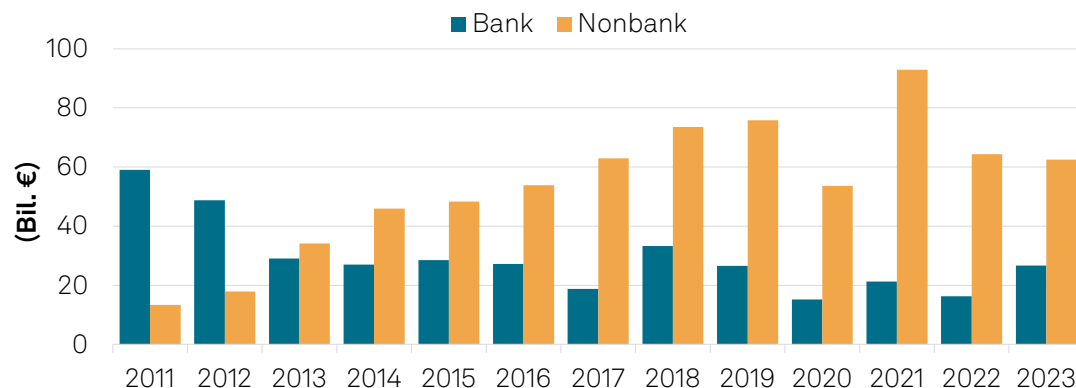
ECB--European Central Bank. (T)LTRO--(Targeted) long-term refinancing operations. Forecasts based on maturity profile. Source: ECB, S&P Global Ratings.

- Central bank liquidity schemes--providing credit institutions with cheap term funding--have for many years acted as a drag on potential securitization issuance. However, the return to more conventional monetary policy means these schemes are now unwinding, raising some banks' need for new funding.
- In the U.K., borrowings of about £150 billion remain outstanding under the Bank of England's term funding scheme with additional incentives for small and midsize enterprises (TFSME). Banks have already been refinancing some of the scheme's four- and six-year funding ahead of scheduled maturities beginning in 2024, including through securitization issuance, although the bulk of maturities do not start until late 2025.
- Borrowings under the European Central Bank's (ECB) equivalent targeted long-term refinancing operations (TLTROs) have now paid down by more than 80% from their €2.2 trillion peak. In general, eurozone banks have had ample liquidity to make most of these repayments without turning to the capital markets. However, the TLTRO wind-down has likely still been one of the factors contributing to higher bank-originated securitization (and covered bond) issuance in 2023, and this could continue as the final drawings mature through 2024.

# Recovery In Bank-Originated Securitization Issuance Set To Gather Pace

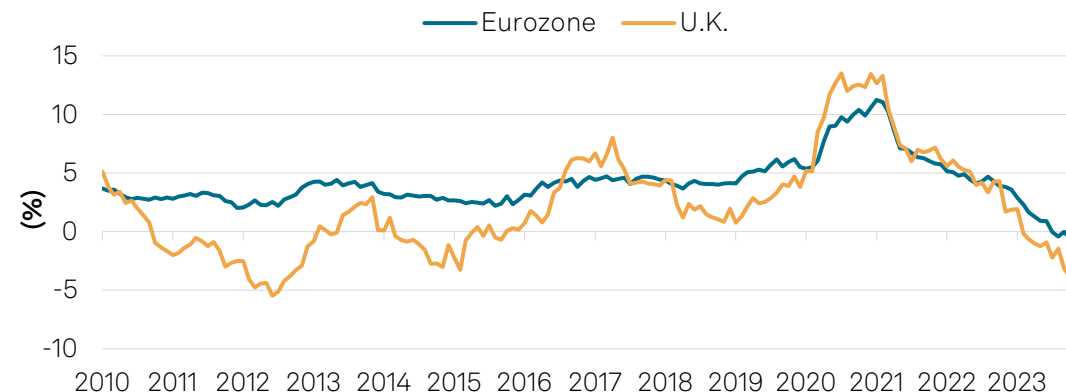
- While bank-originated securitization issuance had stagnated over the past decade, 2023 may have heralded the beginnings of a recovery, with bank originators accounting for 30% of total volumes--the highest share in five years.
- Alongside the wind-down in central bank schemes, slowing deposit growth may also be driving banks' wholesale funding issuance. While financial institutions' deposit funding jumped sharply higher during the pandemic, the systemwide rates of deposit growth in both the eurozone and the U.K. have been trending lower for three years, initially due to post-pandemic normalization and later likely due to the cost of living squeeze, recently entering negative territory and reaching at least a ten-year low. All else being equal, this could also support bank-originated securitization issuance, depending on the relative costs of funding alternatives.

## Bank versus nonbank securitization issuance



Source: S&P Global Ratings.

## 12-month deposit growth



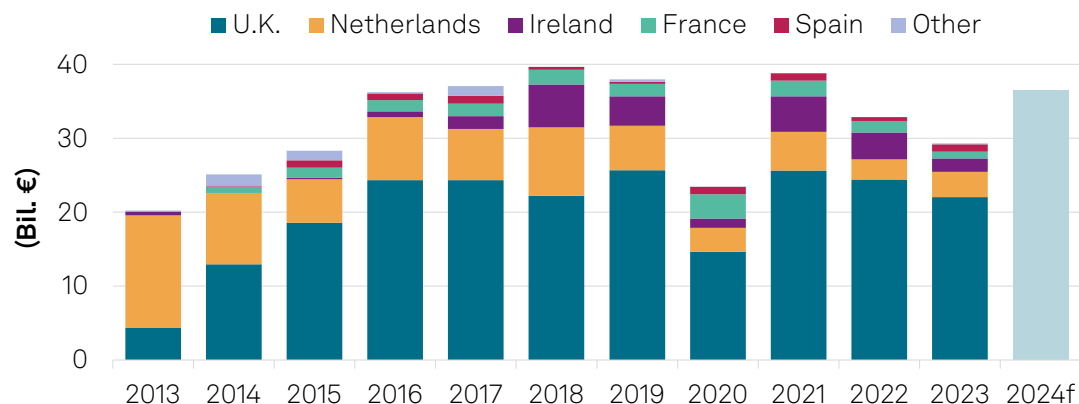
Deposit growth based on lending to households and nonfinancial corporates. Source: European Central Bank, Bank of England, S&P Global Ratings.

# RMBS & ABS

# RMBS Issuance Fell In 2023 But Will Likely Bounce Back In 2024

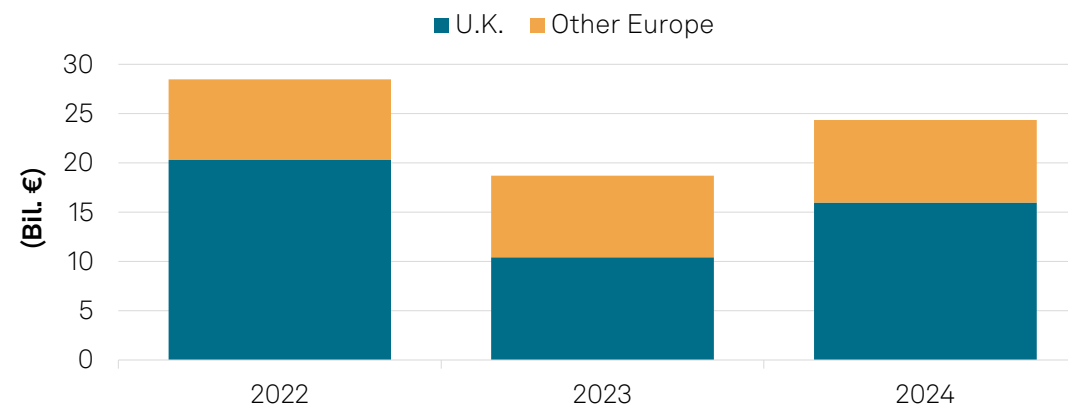
- RMBS volumes were down 11% to €29 billion in 2023, with declines in the U.K. buy-to-let (BTL) and Irish sectors only partly offset by more U.K. prime issuance. However, this drop was mainly due to a lack of large legacy refinancings and transaction count was up 15%.
- Issuance volumes should recover in 2024, given a larger pipeline of transactions that are due to reach call dates. In the U.K., €16 billion of outstanding RMBS has a call date this year, which is up more than 50% on 2023. That said, some calls may not be economic for originators, given high primary market spreads relative to legacy step-up margins.
- Despite depressed underlying mortgage lending, bank-originated RMBS issuance will likely continue to pick up, as more lenders repay their borrowings from central bank liquidity schemes and therefore engage further with wholesale funding markets.

## European RMBS issuance, by subsector



f--Forecast. Investor-placed issuance only. Source: S&P Global Ratings.

## European RMBS call pipeline



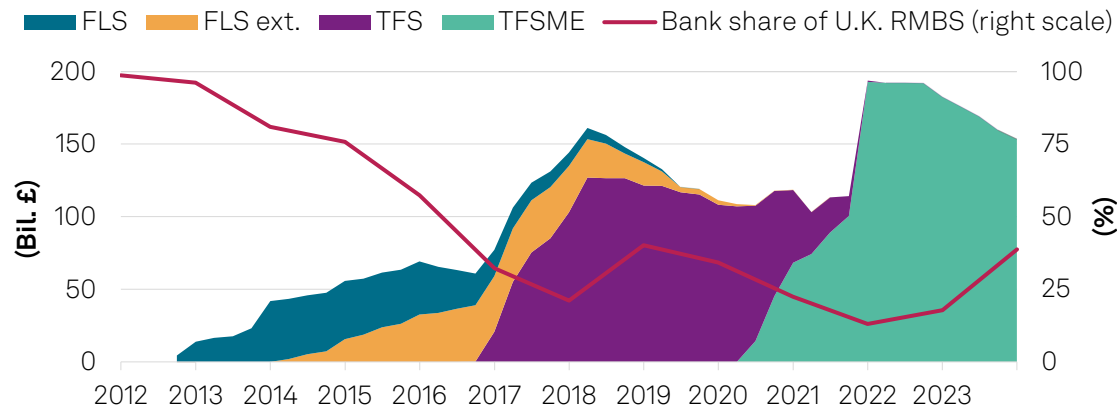
Based on outstanding balances as of approximately mid-December for transactions with first optional redemption dates in the following year. Investor-placed issuance only. Source: Bloomberg, S&P Global Ratings.



# The Looming Maturity Of Central Bank Funding Supports U.K. RMBS Issuance

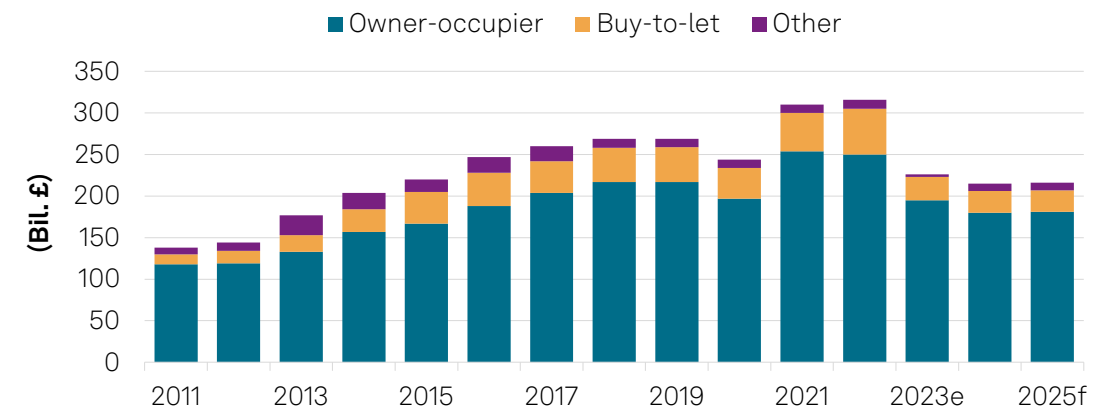
- Borrowings from the Bank of England's TFSME facility gradually start maturing in 2024. While banks will not need to refinance all of their drawings under the scheme, even a small portion of the outstanding £150 billion is material in the context of the RMBS market.
- Most of the financial institutions with TFSME borrowings still outstanding have previously issued securitizations, and the bank-originated share of new U.K. RMBS supply already rose to nearly 40% in 2023 after central bank funding peaked.
- That said, subdued underlying mortgage originations will restrict issuance. UK Finance, the trade body, reported a 28% decline in U.K. gross mortgage lending in 2023 and foresees depressed activity continuing until at least 2026. BTL lending saw a disproportionate 49% decline, although pressure to term out warehoused collateral in 2024 could support more BTL RMBS issuance.

## Central bank borrowing versus bank U.K. RMBS issuance



FLS (ext.)--Funding for Lending Scheme (and extension). TFS(ME)--Term Funding Scheme (with additional incentives for small- and mid-sized enterprises). Source: Bank of England, S&P Global Ratings.

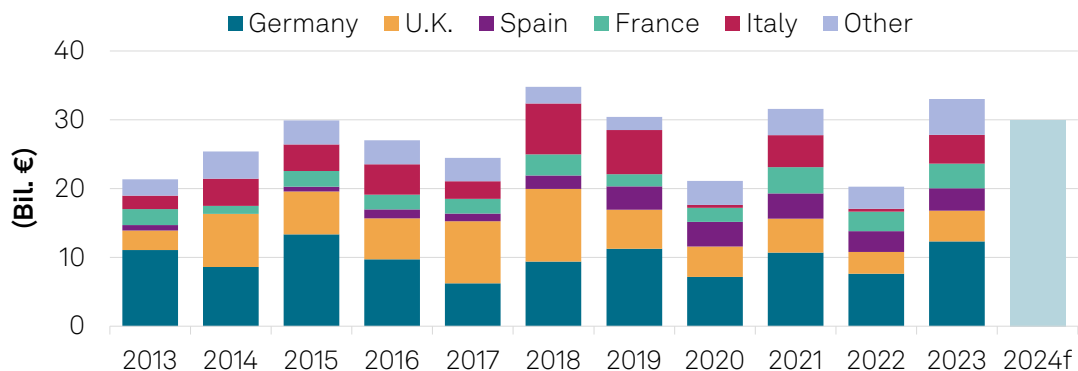
## U.K. gross mortgage lending



e--Estimate. f--Forecast. Source: U.K. Finance forecasts, S&P Global Ratings.

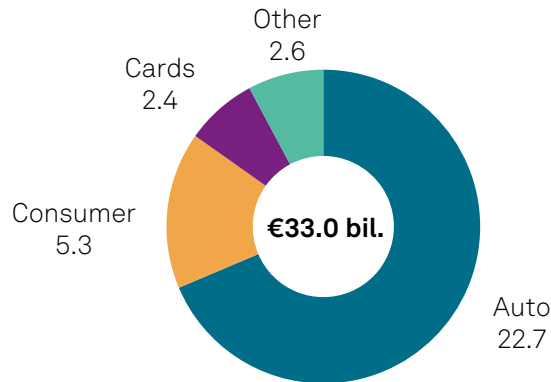
# ABS Issuance Hit A Five-Year High In 2023 And Remains Diverse

European ABS issuance, by country

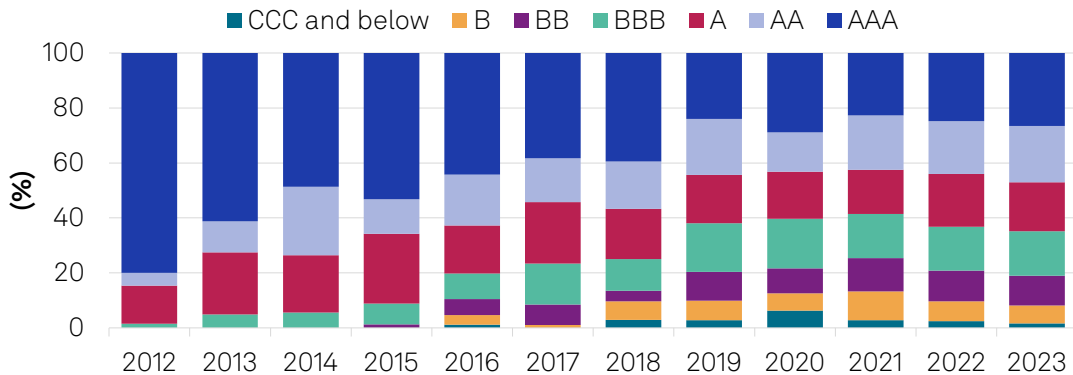


- In 2023, investor-placed ABS issuance jumped to €33 billion from €20 billion in 2022, and most traditional collateral types and countries continued to be represented. Transactions backed by auto loan and lease collateral dominated, with issuance from nine countries.
- Almost 20% of tranches placed with investors (by count) were rated in the 'BB' category or lower, reflecting some originators' use of securitization for capital relief, rather than solely as a funding tool. This could help to support issuance further.

2023 issuance mix, by subsector (bil. €)



Issuance mix, by number of tranches and rating category

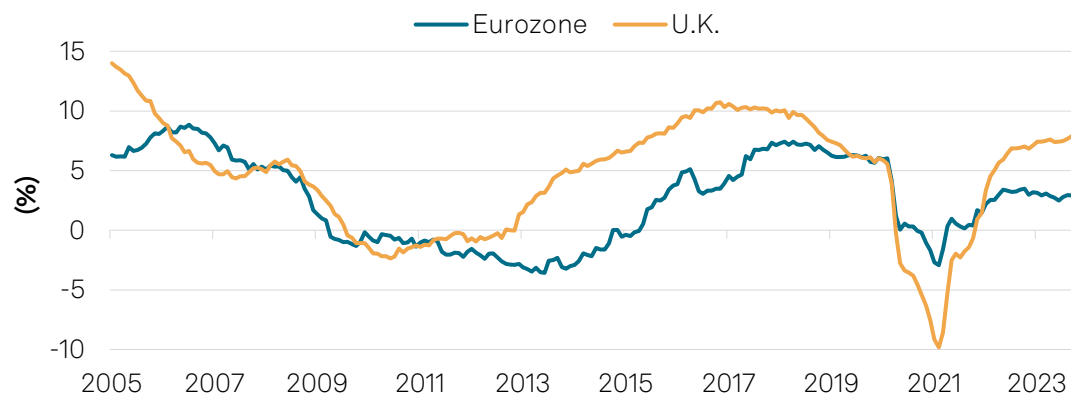


Investor-placed issuance only. Source: S&P Global Ratings.

# Recovering Demand For Consumer Credit Could Support ABS Issuance

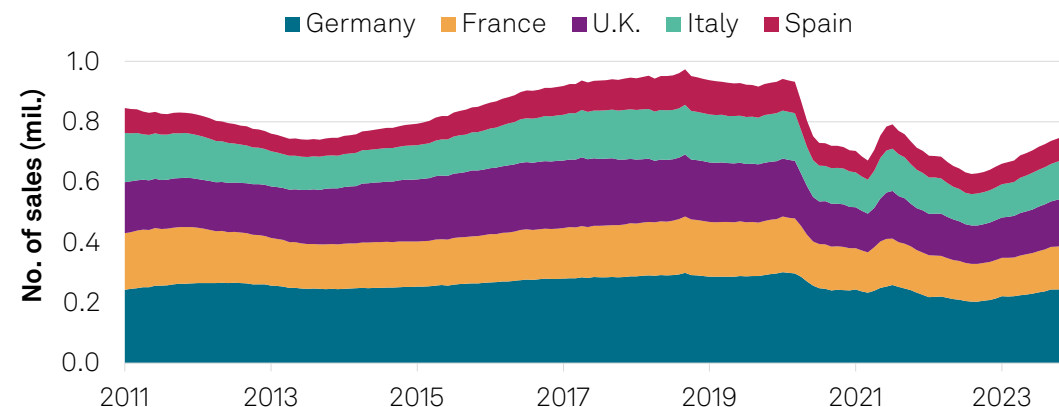
- Origination volumes for the types of lending that back consumer ABS are continuing to recover after a dip during the pandemic, despite the cost of living crisis and higher rates, likely helped by the prospect of a return to real income growth.
- In the eurozone, banks' net lending to households for consumption remained positive through 2023, while in the U.K. it recovered to a five-year high. In 2023, sales of new passenger vehicles in major auto ABS markets also continued to gradually recover--which is generally positive for auto ABS supply--although they remain substantially lower than before the pandemic.
- Increasing use of securitization to fund auto finance for non-prime borrowers or secured on used vehicles further adds to growth prospects. Some originators are also exploring the securitization of new collateral types, such as solar and buy now, pay later finance.

## Growth in lending to households for consumption



Source: European Central Bank, Bank of England, S&P Global Ratings.

## Monthly new auto sales volumes

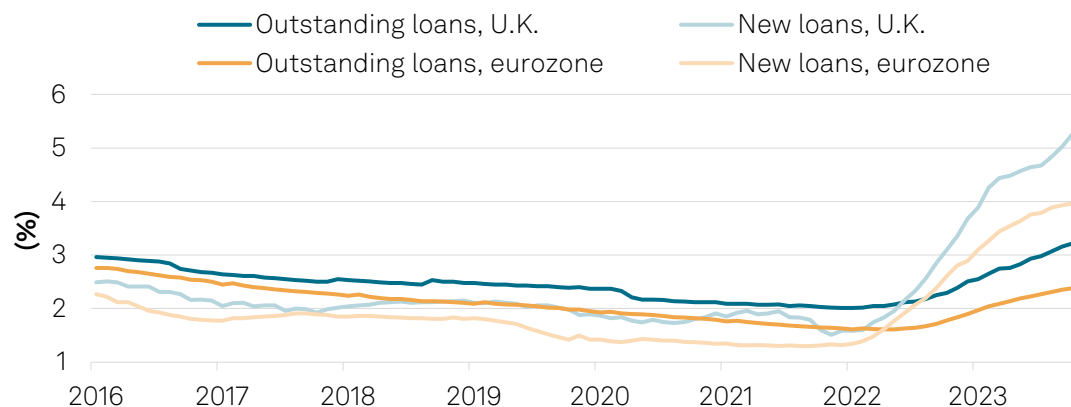


Based on 12-month rolling averages. Source: National automobile associations.

# Fixed-Rate Loans Are Acting As A Shock Absorber For Some European RMBS

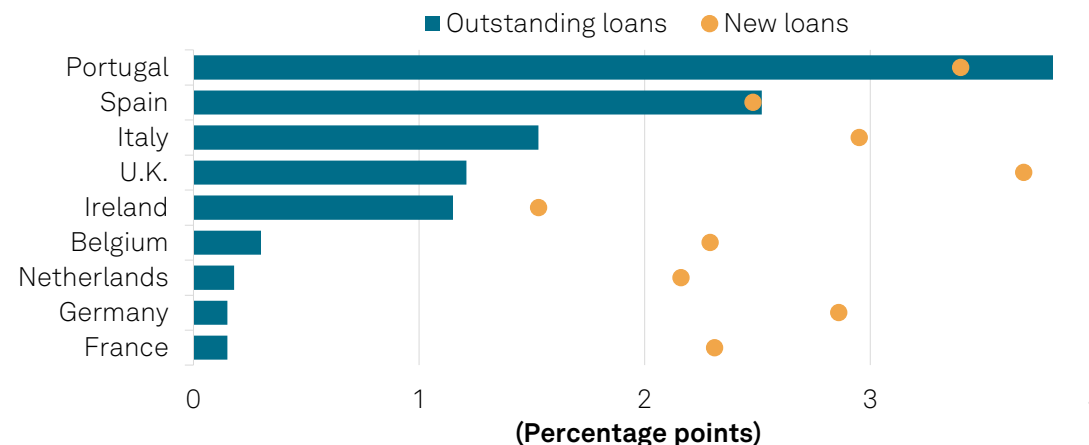
- Although interest rates on new mortgage lending have risen sharply since the end of 2021, many borrowers with outstanding loans have not yet been exposed to an increase in their monthly payments, given the prevalence of fixed-rate products in many countries.
- Among RMBS markets, this lag effect is largest in the U.K., where the average existing borrower has suffered a rate shock of only 1.2 percentage points--one-third of the 3.7 percentage point rate increase that has occurred on new lending over the same period.
- While rate rises have passed through quickly to borrowers in Spain and Portugal, for example, in most other mortgage markets borrowers' ability to service their debt will likely increase, due to significant wage growth, before they are effectively exposed to the new rate environment.

## Mortgage rates, new versus outstanding lending



Sources: European Central Bank, Bank of England, S&P Global Ratings.

## Mortgage rate shock, 2021-2023, by country

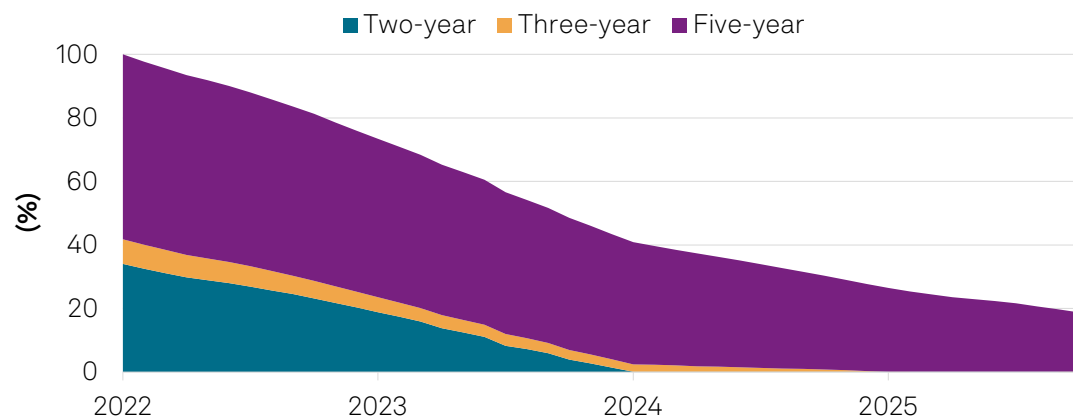


Rate shock is defined as the increase in average rate from end-2021 to the latest available data point as of end-October 2023. Source: S&P Global Ratings.

# U.K. Case Study—Many Mortgage Borrowers Still Insulated From Rate Rises

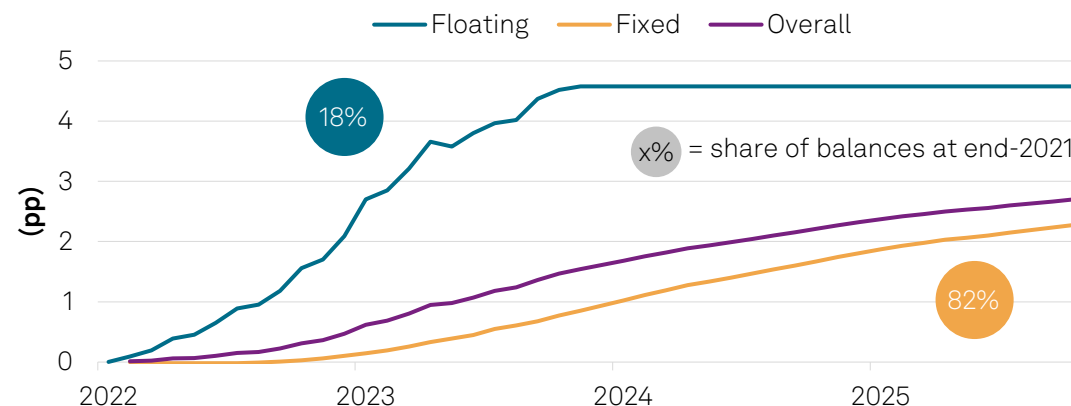
- When rate rises generally began in early 2022, 82% of outstanding U.K. mortgage balances were paying a fixed interest rate.
- Two years on, about 40% of those balances remain on the same fixed-rate contracts and have therefore been fully insulated from rate rises so far. By the end of 2024, this will still apply to more than 25% of pre-2022 fixed-rate loan balances.
- Even borrowers who refinanced to a new fix at their rate reset date have seen an average rate increase of only 1.7 percentage points (pp). We estimate that this rises to 2.5pp by end-2024--still much lower than the 4.6pp rise seen by floating-rate borrowers.
- For most borrowers, the rate shock experienced is well within affordability stresses typically applied at loan origination. Marginal "mortgage prisoners", who struggle to refinance from standard variable rates, are clearly under more pressure.

## Fixed-rate loans still outstanding from pre-2022 era



Based on the stock of U.K. fixed rate mortgage loans outstanding as of end-2021. Estimates assume that no loans repay before their rate reset date. Source: Bank of England, S&P Global Ratings.

## Estimated rate shock, by loan type

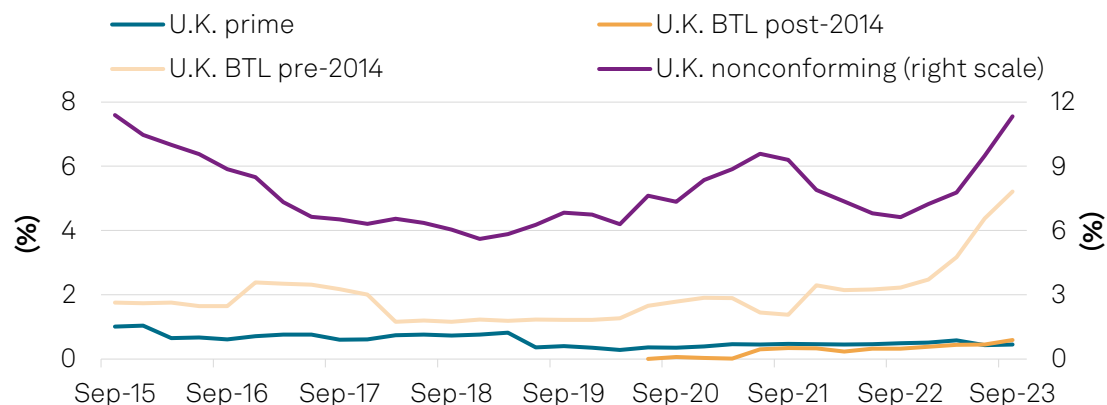


pp--Percentage points. Based on loan rate type at end-2021. Estimates assume that rates stay flat after October 2023 and all fixed rate borrowers refinance onto a similar product at the reset date. Source: Bank of England, S&P Global Ratings.

# Trends In RMBS Pool Arrears Are Diverging Between Subsectors

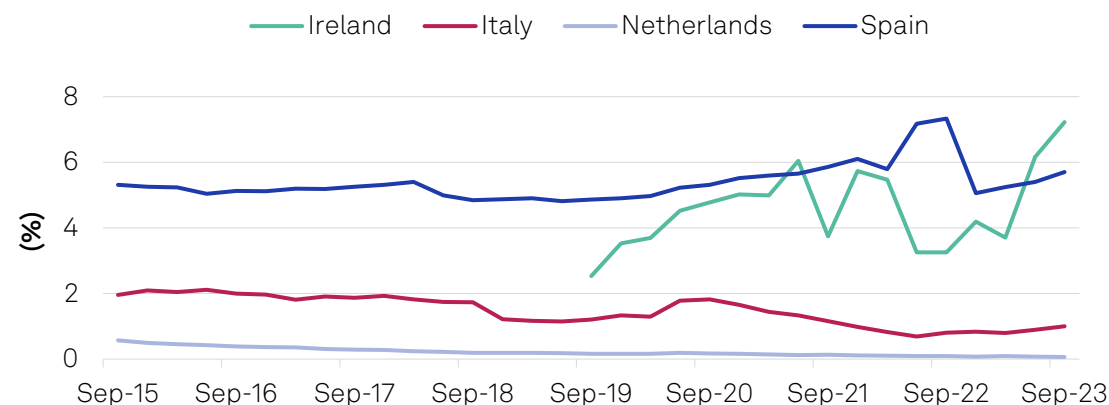
- In general, arrears reported for the mortgage pools backing RMBS have not increased significantly since rates started to rise.
- The U.K. nonconforming, U.K. legacy buy-to-let (BTL), and Irish reperforming subsectors are exceptions, where the higher prevalence of floating rate and interest-only loans--along with limited refinancing prospects--has exposed borrowers to sharply higher payments.
- Outside the U.K., collateral tends to be long-term fixed (e.g., the Netherlands) or highly seasoned (e.g., Spain), limiting deterioration.
- Arrears will likely continue to increase as more fixed-rate periods end and borrowers refinance into the higher-rate environment.
- However, proactive servicing and forbearance may lead to higher collection rates on delinquent loans than in prior periods of stress.

## U.K. RMBS 90+ day arrears indices



BTL--Buy-to-let. Source: S&P Global Ratings.

## Other European RMBS 90+ day arrears indices



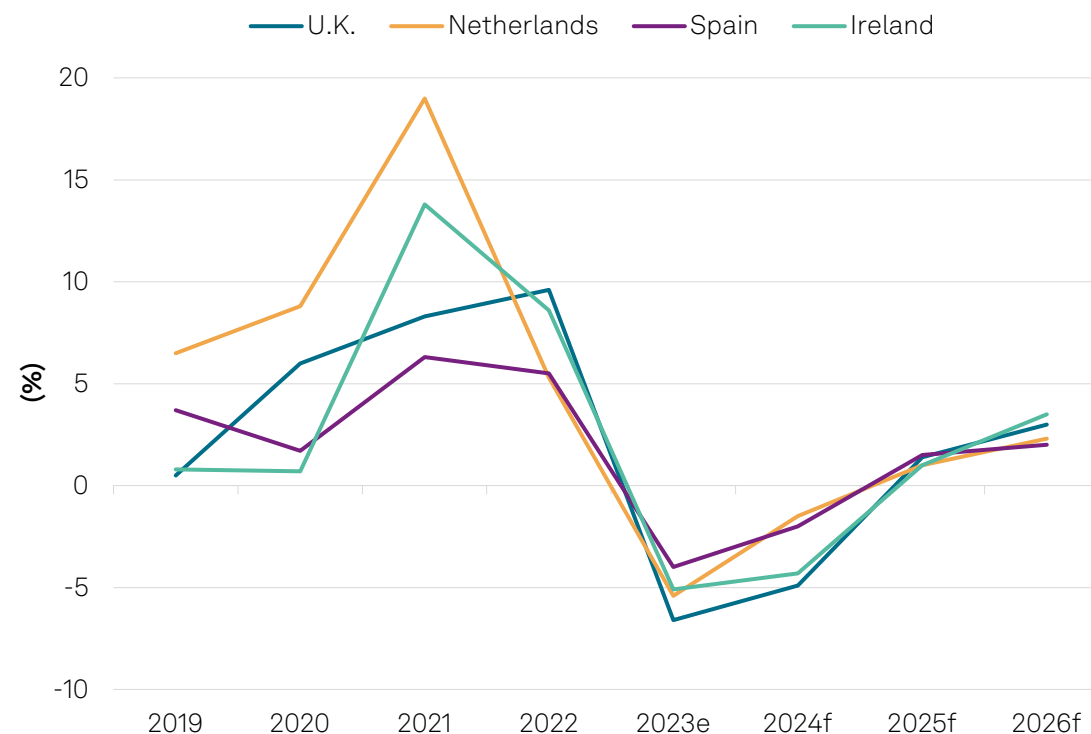
Source: S&P Global Ratings.



# House Prices Will Continue To Correct, But Growth Should Resume After 2024

- In 2023, house prices began correcting in the major European RMBS markets of the U.K., Ireland, the Netherlands, and Spain, given weakening demand brought on by higher mortgage rates.
- We expect a sustained correction, with average prices reaching a trough by the end of 2024, although the scale of further nominal price declines should be limited.
- Key mitigating factors are the generally slow pass-through of mortgage pain to household budgets, thanks to often large shares of fixed-rate contracts, and the continued strength of European labor markets.
- Though we do not expect a crash, our forecasts still amount to sizeable peak-to-trough declines of around 12% in the U.K., for example, and 8% across the European countries that we cover.
- From 2025, we expect house prices in RMBS markets to resume modest rates of growth. A stronger rebound is unlikely, given that homeowners will remain subject to higher borrowing costs in real terms, even after central banks begin to ease rates again.

House price growth forecasts for RMBS markets

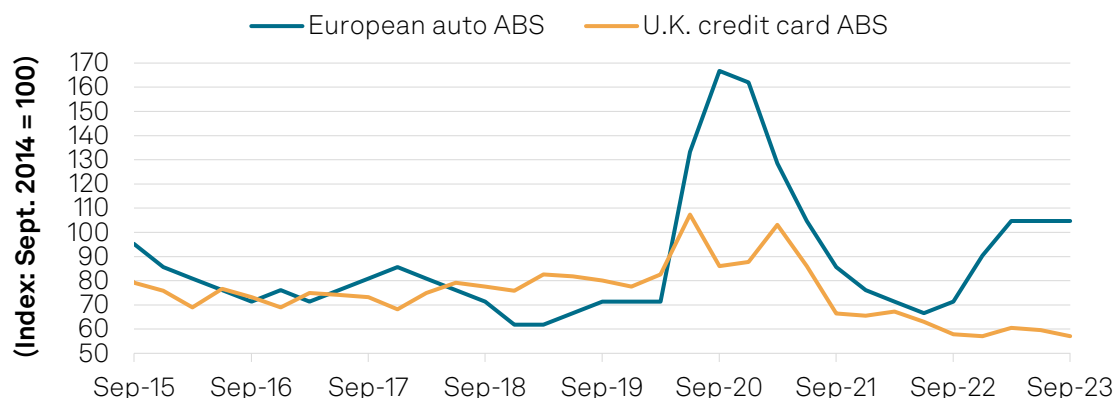


e--Estimate. f--Forecast. Source: S&P Global Ratings.

# ABS Arrears Are Still Stable; High Used Car Prices Support Residual Values

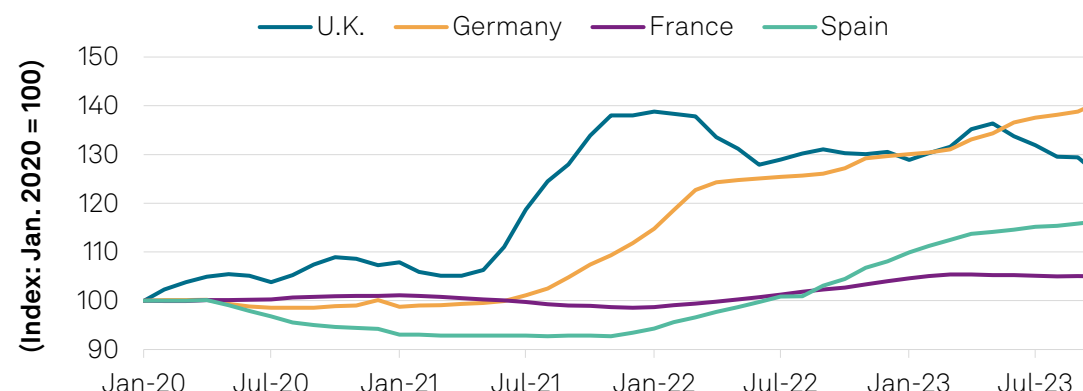
- Average total arrears in prime auto ABS have remained low and broadly stable at under 1% since late 2021, while 90+ day arrears have recently trended lower than 0.25%.
- In the U.K., auto ABS are mainly backed by personal contract purchase (PCP) schemes, and we also rate several European auto lease ABS. In these transactions, there may be residual value risk, linked to trends in used vehicle values. These were buoyant post-pandemic in some European countries but are now under more pressure due to a normalization in the supply of new vehicles.
- Credit card ABS performance also remains resilient. In the U.K. and rest of Europe, total delinquencies are only 1.3% and 1.8%, respectively, and other performance indicators, such as payment rates and yield, also remain robust.

## European ABS 90+ day delinquency indices



Source: S&P Global Ratings.

## Used car price index



Source: National statistical offices.

# Some Nuanced Areas Could Be Significant For Credit Performance

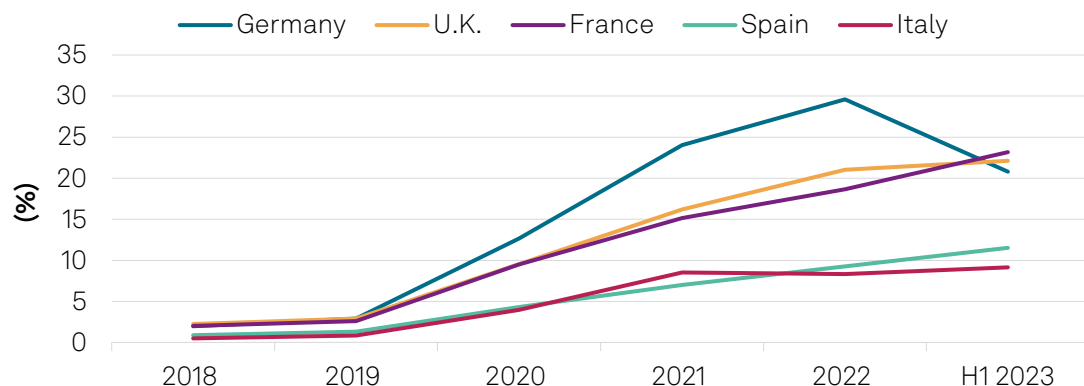
- **Mortgage collection rates.** If servicing is proactive, borrowers who are in arrears may be more likely to make regular partial payments, even if they cannot afford their full loan installments. This behavior will slow the increase in arrears and can be quantified using the collection rate, defined as the proportion of aggregate scheduled payments for a period that are successfully collected. For a given level of arrears, collection rates therefore provide further color on credit performance.
- **U.K. mortgage affordability assessments.** For fixed-rate loans, U.K. mortgage lenders have typically tested at origination whether the borrower could still afford repayments at a higher future rate of three percentage points above the reversionary rate. However, the regulator removed this requirement in August 2022. The 2023 Mortgage Charter also means that many borrowers can now be offered a product switch and new mortgage terms by their existing lender, without a further affordability check. This may lead to relatively higher credit risk going forward should rates unexpectedly rise further.
- **BTL servicing practices.** Where a servicer is dealing with delinquent loans to a portfolio BTL borrower, they may work with the borrower to selectively prioritize the property sales that will lower the aggregate leverage and make the remaining portfolio viable. This could be preferable to a more widespread and rapid liquidation, which could potentially suppress property prices in a local market. Although the former strategy could be credit positive overall, it may result in slower cash flows in the context of an RMBS transaction.
- **Non-prime borrowers.** Triggered by a rise in the cost of living, the recent credit stress is likely disproportionately affecting non-prime borrowers, including those with lower incomes. These borrowers likely spend a greater proportion of their income on energy and food--which initially saw the fastest price inflation--and are less likely to have savings that could temporarily supplement income to service debt.

Source: S&P Global Ratings.

# The Rising Prevalence Of Electric Vehicles Brings New Risks For Auto ABS

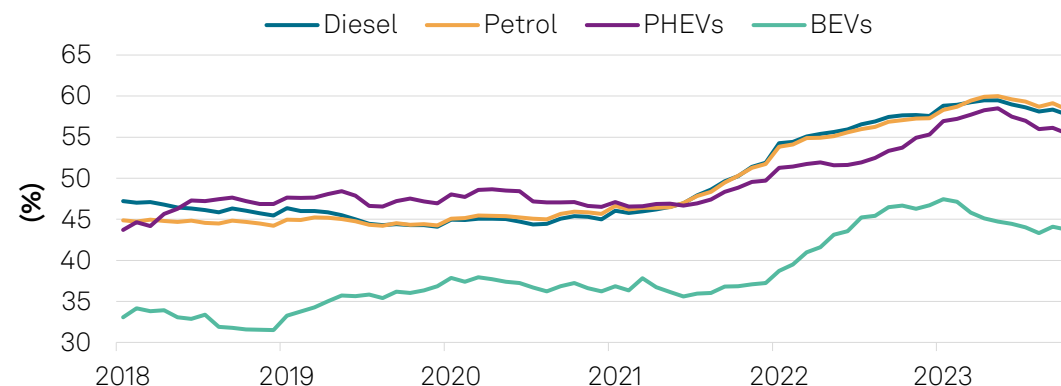
- Electric vehicles (EVs) represent a growing share of new auto sales across all the major European auto ABS markets.
- Data available so far suggests that battery electric vehicles have generally depreciated more quickly than their internal combustion engine (ICE) equivalents, potentially reducing recoveries and residual values in securitized pools of EV loans and leases.
- Secondhand values could continue to face pressure in the near term, as demand for used EVs may not keep pace with the growth in new registrations, given falling new vehicle prices and ongoing improvements in battery technology and range.
- There will likely be an eventual inflection point, where ICE vehicle demand will drop and reverse this effect, though not within the tenor of current auto ABS transactions.

## Electric vehicle share of total sales



Includes battery electric vehicles and plug-in hybrid electric vehicles. Source: S&P Global Mobility.

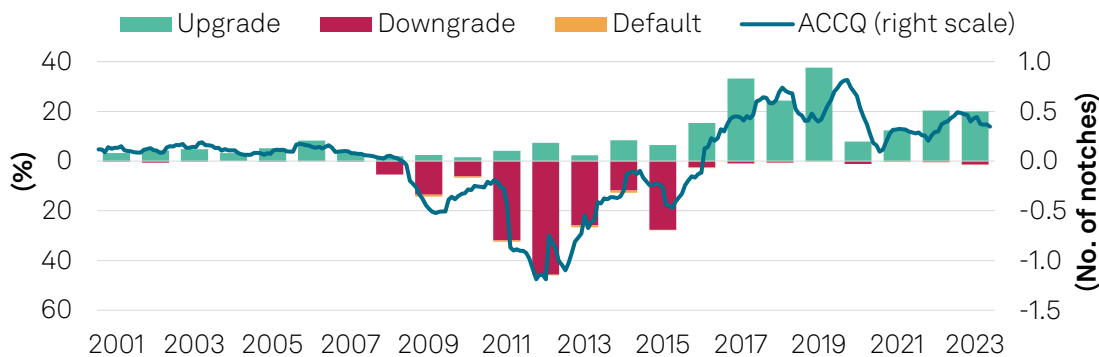
## Residual value as % of initial list price, by fuel type



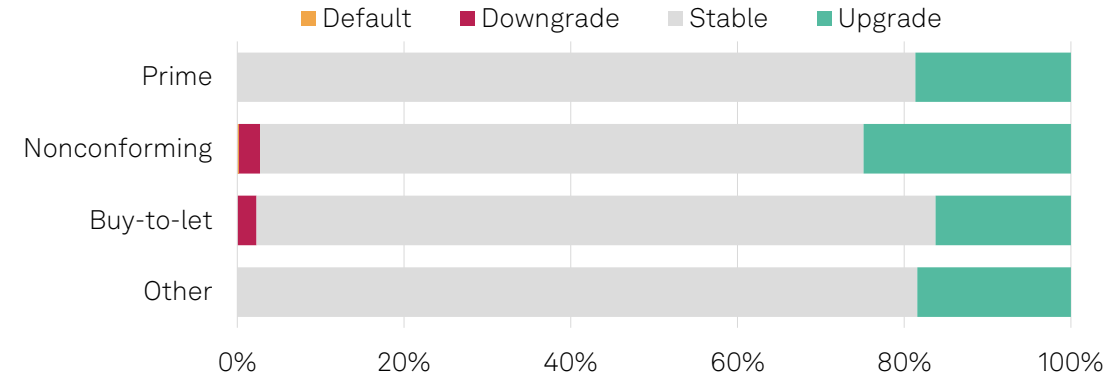
PHEVs--Plug-in hybrid electric vehicles. BEVs--Battery electric vehicles. Based on a simple average across data for France, Germany, Italy, Spain, and the U.K. Source: Autovista Group, S&P Global Ratings.

# Upgrades Have Dominated Recent RMBS And ABS Rating Actions

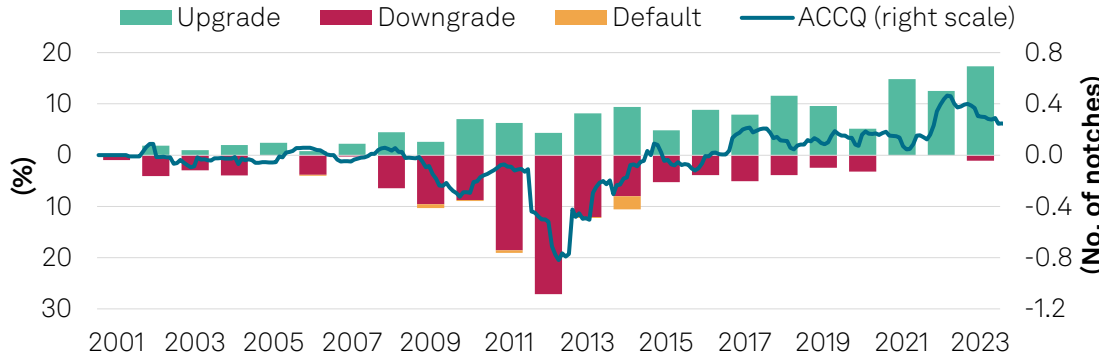
RMBS transition rates and change in credit quality



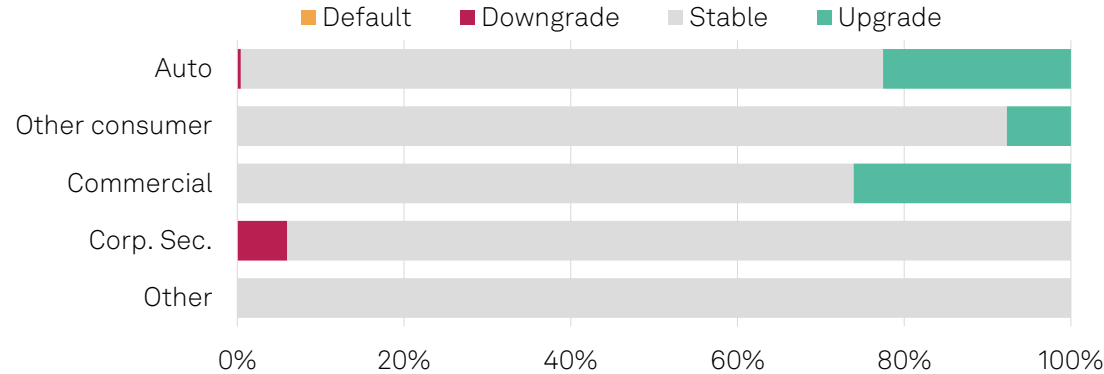
RMBS subsector rating transitions, 2023



ABS transition rates and change in credit quality



ABS subsector rating transitions, 2023

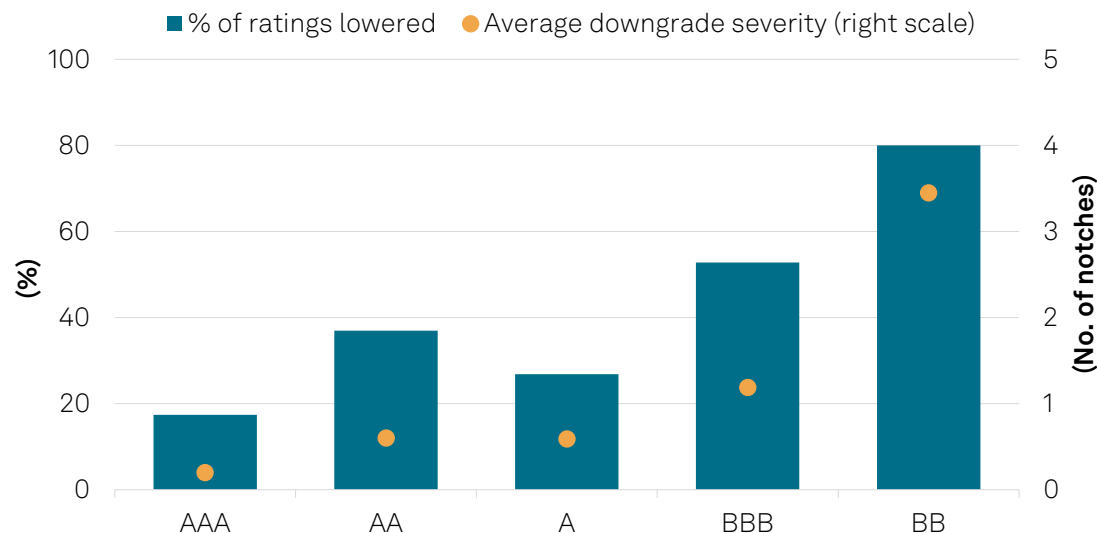


ACCQ--Average change in credit quality, i.e., the average number of notches by which ratings changed over a trailing 12-month period. Downgrades exclude defaults. Source: S&P Global Ratings.

# RMBS Scenario Analysis—Severe Stress Would Still See Limited Downgrades

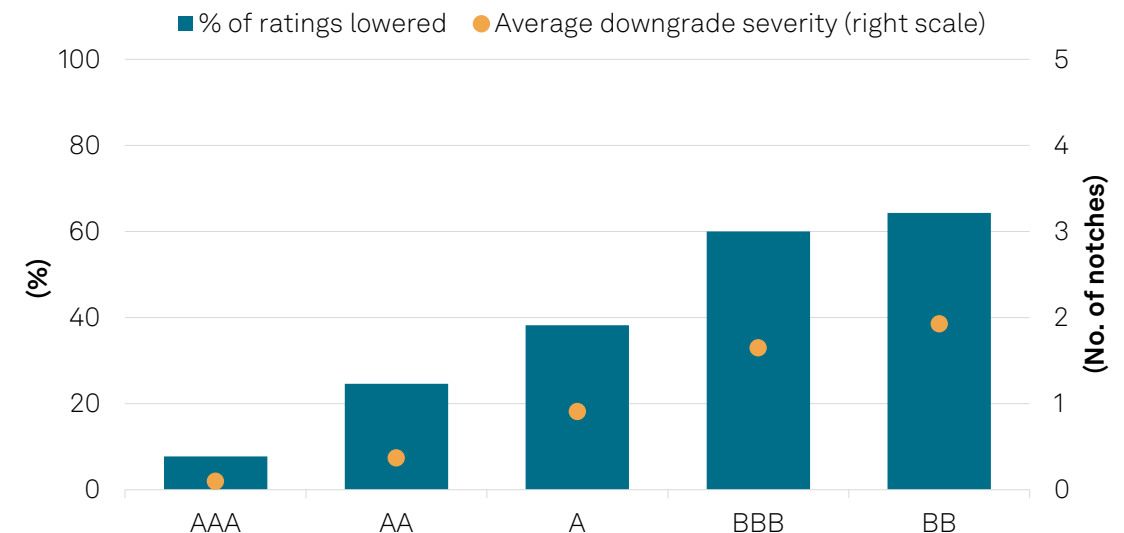
- Testing the resilience of rated European RMBS tranches to severe hypothetical stress scenarios (e.g., a four percentage point rise in 90+ day arrears and a 10% house price decline) reveals substantial ratings stability, especially at the top of the capital structure.
- 'AAA' rated tranches in our U.K. RMBS sample, for example, saw an average downgrade of only 0.2 notches, with fewer than 20% of ratings affected. Our non-U.K. sample showed similar results. This is despite such an arrears rise representing a more significant stress than observed during the 2008-2009 financial crisis for most subsectors (excluding U.K. nonconforming RMBS).

## U.K. RMBS scenario analysis



Based on a 4pp increase in 90+ arrears rate and a 10% house price decline for a sample of 256 rated RMBS tranches. For more details, see "[Scenario Analysis: How Much Shock Can U.K. RMBS Take?](#)". Source: S&P Global Ratings.

## Other European RMBS scenario analysis



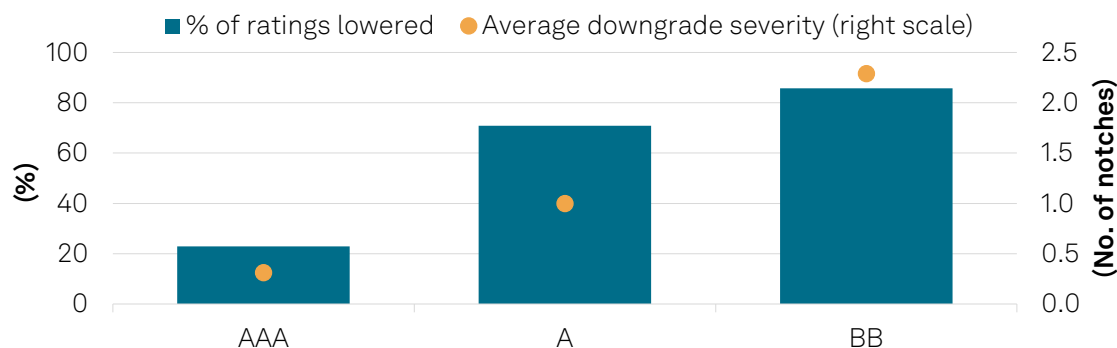
Based on a 4pp increase in 90+ arrears rate and a 10% house price decline for a sample of 195 rated RMBS tranches. For more details, see "[Scenario Analysis: How Much Shock Can European RMBS Take?](#)". Source: S&P Global Ratings.



# ABS Scenario Analysis—Both Auto And Credit Card Transactions Are Robust

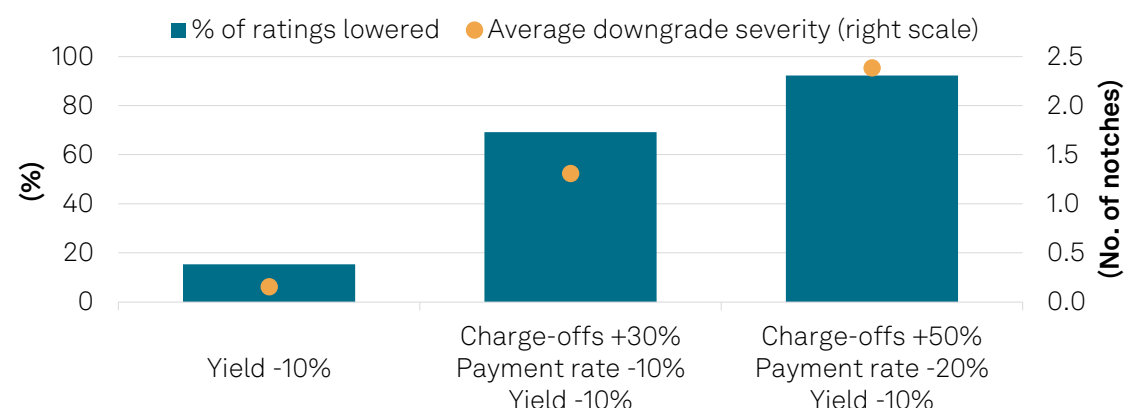
- Tested under hypothetical scenarios of increased credit stress, consumer-related ABS transactions that we rate typically demonstrate relative ratings stability. In a study on auto ABS, only about 20% of 'AAA' rated tranches would see a downgrade--and mostly of only one notch--even if we changed our base-case assumptions for gross loss rate and recovery rate by 10 percentage points up and down, respectively. There would be larger impacts for lower-rated tranches or more severe scenarios.
- For European credit card ABS, a simultaneous 30% increase in charge-off rate and 10% decrease in both payment rate and yield, would result in an average downgrade of only 1.3 notches, with no tranche seeing its rating lowered by more than three notches.
- Transactions mostly include protections such as tight performance triggers that benefit senior tranches more than junior ones.

## European auto ABS scenario analysis



Based on a 10 percentage point increase/decrease in gross loss/recovery rate base case and 109 rated auto ABS tranches. For more details, see ["Scenario Analysis: How Much Shock Can European Auto ABS Take?"](#). Source: S&P Global Ratings.

## European credit card ABS scenario analysis



Scenario adjustments are to 'AAA' stresses. Based on 13 credit card ABS. For more details, see ["Scenario Analysis: European Credit Card ABS On Course For A Soft Landing Despite The Cost Of Living Crisis"](#). Source: S&P Global Ratings.

# Pub Corp. Sec. Scenario Analysis—Little Impact From A 10% Fall In EBITDA

- Our scenario analysis indicates that strong liquidity support in the U.K. pub corporate securitizations that we rate will cushion any potential reductions in EBITDA from higher costs, until the industry recovers to near pre-pandemic levels by 2025-2026, in our view.
- A 10% decline in our long-term forecasted EBITDA for managed and hybrid pub-backed transactions would generally not affect our current ratings, while a 25% decline could result in up to a four-notch downgrade.

## Potential ratings impact from a change in forecast long-term EBITDA (no. of notches)

	Marston's		Greene King			Mitchells & Butlers				
	Class A	Class B	Class A	Class AB	Class B	Class A	Class AB	Class B	Class C	Class D
EBITDA scenario	BB+	B+	BBB	BBB-	BB+	BBB+	BBB	BB	B+	B+
-10%	up to 1	-	up to 1	-	up to 2	-	-	up to 1	-	-
-15%	up to 2	-	up to 2	up to 1	up to 2	-	up to 1	up to 2	-	-
-20%	up to 3	-	up to 3	up to 2	up to 3	-	up to 1	up to 2	-	-
-25%	up to 4	up to 1	up to 4	up to 3	up to 4	up to 2	up to 3	up to 2	up to 2	up to 2

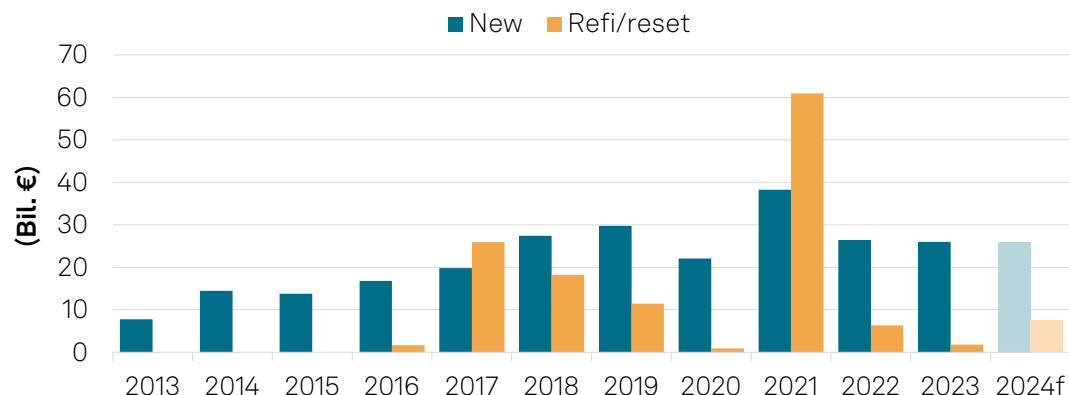
Input assumption per scenario is a hypothetical percentage reduction to each borrower's S&P Global Ratings-adjusted long-term forecast EBITDA post-2025. For more details, see "[Scenario Analysis: Will Lower EBITDA Recovery Leave U.K. Pub Corporate Securitizations In The Cellar?](#)". Source: S&P Global Ratings.

# CLO

# CLO Issuance Is Hanging On As Leveraged Finance Activity Begins To Recover

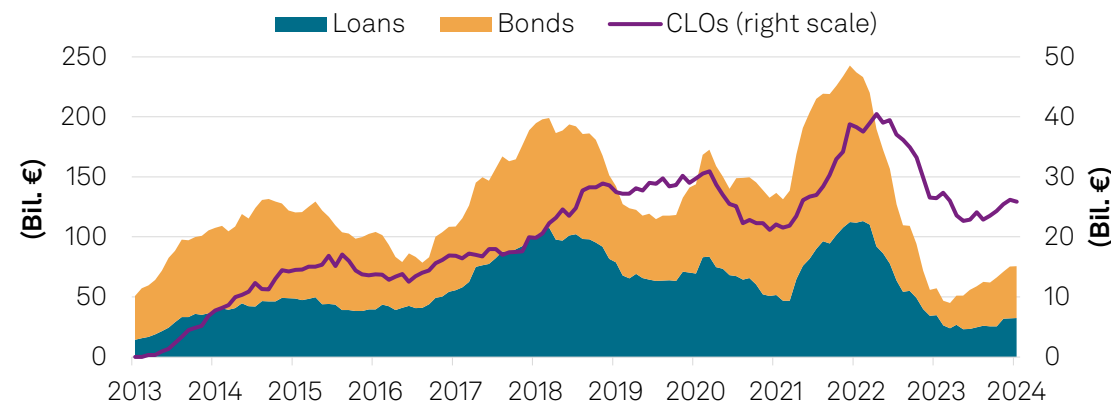
- New European CLO issuance remained steady at €26 billion in 2023, despite a backdrop of underlying leveraged finance originations still close to decade lows, as corporate borrowers' appetite for debt has ebbed in the higher interest rate environment.
- CLO volumes will likely be broadly flat in 2024, although a gradual pickup in high-yield bond issuance bodes well in the longer term.
- In addition, if CLO spreads continue to tighten, more managers may once again have an economic incentive to refinance or reset transactions that have exited their non-call periods.
- CLO refinancings and resets already began to pick up in late 2023, after a 17-month absence, and could be a bright spot for 2024, accounting for €5 billion-€10 billion in further issuance activity.

## European CLO issuance



f--Forecast. Source: S&P Global Ratings, Pitchbook LCD.

## European leveraged finance versus CLO volumes

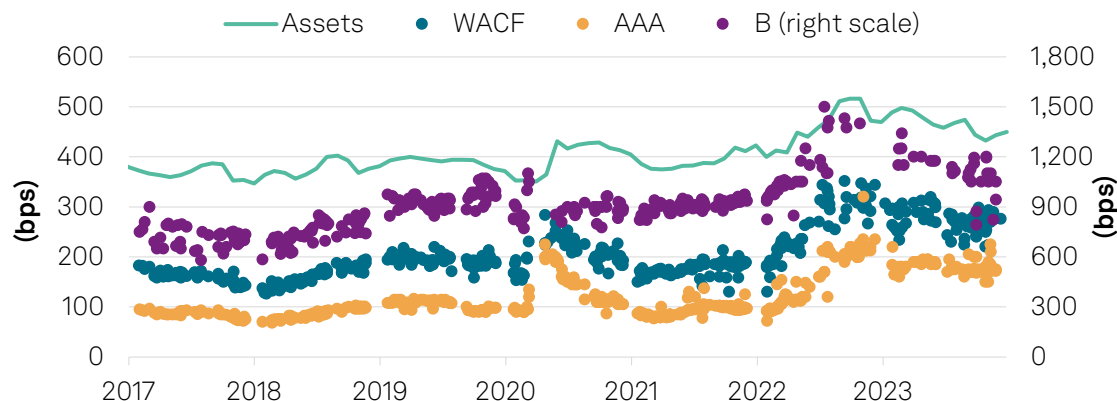


12-month rolling basis. Loan figures are institutional only. Source: S&P Global Ratings, Pitchbook LCD.

# Weak Transaction Economics Are Limiting Equity Demand

- Apart from limited primary market loan volumes, new CLO formation also continues to be hampered by an unfavorable combination of asset and liability spreads, which has lowered equity returns and made placing equity with third party investors more challenging.
- Since mid-2022, the traditional "CLO arbitrage" has generally been running below its long-term average, and previous opportunities to source discounted collateral in the secondary market and boost returns through par accretion have waned.
- These conditions did not deter several new managers from entering the European CLO market in 2023 and there is likely pent-up supply in the form of warehouse facilities awaiting a CLO exit when conditions improve.
- However, a downside risk is that more credit deterioration keeps CLO spreads high, further limiting managers' ability to place equity.

## European CLO asset and liability spreads



WACF--Weighted-average cost of funding as coupon margin over three-month EURIBOR. Bps--Basis points. Based on new issue transactions only. Source: S&P Global Ratings, Pitchbook LCD.

## European CLO arbitrage



CLO arbitrage is defined as the difference between underlying leveraged loan spreads and CLO liability spreads. Source: S&P Global Ratings.

# The Middle Market CLO Sector Could Be Poised For A European Debut

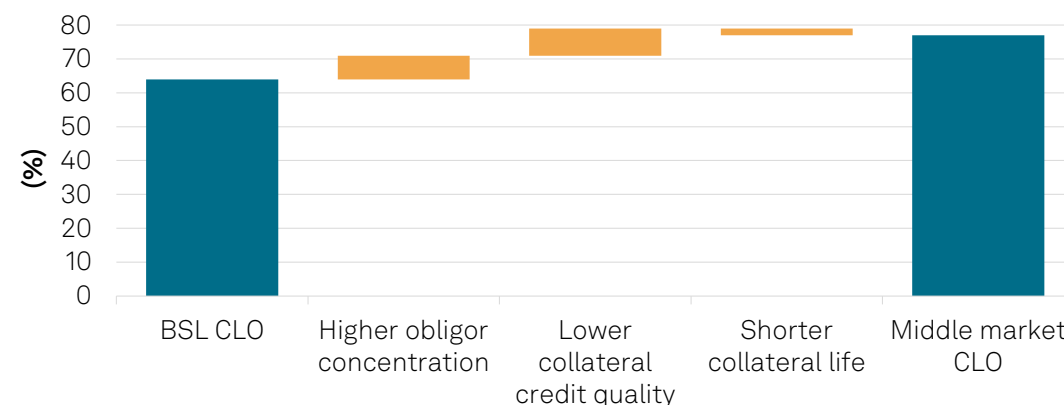
- In the U.S., middle market CLOs have been an established asset class since at least 2004, and volumes continue to grow as mid-sized corporates seek alternative funding sources in an environment of tougher financing conditions. Europe has yet to see equivalent transactions come to market, but that could soon change.
- Compared with broadly syndicated loan CLOs, middle market collateral pools have some riskier characteristics, in our view, including higher concentration and lower obligor credit quality. However, this could be partially offset by credit-positive factors, including a shorter weighted-average life, as well as higher spreads and assumed recovery rates, which would benefit the cash flow analysis.
- It remains to be seen if these characteristics can be incorporated into structures with sufficient demand to function economically.

## Comparison of example portfolio characteristics

	Middle market CLO	BSL CLO	Difference	Credit effect
Obligor count	40	150	-110	-
SPWARF	3,600	2,900	+700	-
WAL (years)	4.3	4.7	-0.4	+
Portfolio WARR (%)	39.0	37.7	+1.3	+
Portfolio WAS (%)	6.0	4.4	+1.6	+

BSL--Broadly syndicated loan. SPWARF--S&P Global Ratings' weighted-average rating factor. WAL--Weighted-average life. WARR--Weighted-average recovery rate. WAS--Weighted-average spread. Source: S&P Global Ratings.

## Stylized differences in 'AAA' scenario default rate



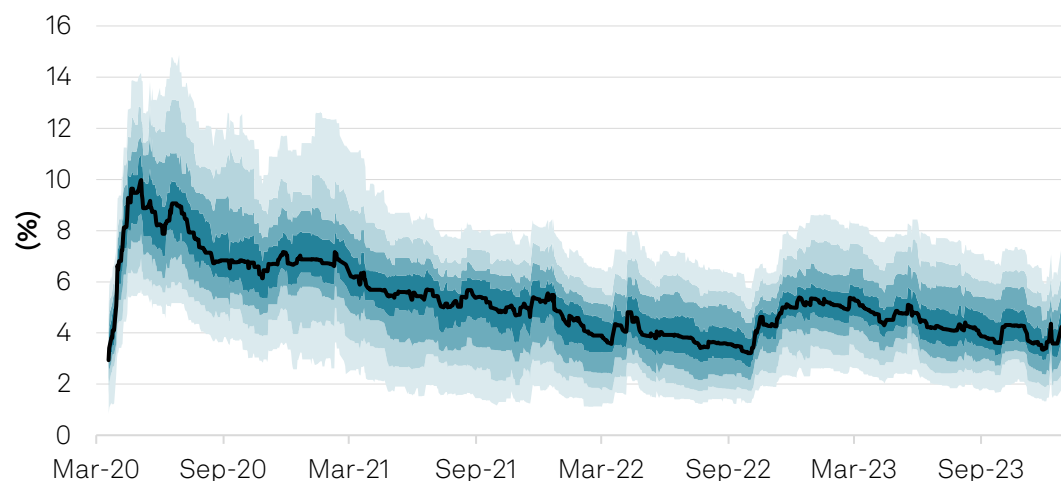
BSL--Broadly syndicated loan. Based on hypothetical BSL and middle market CLO portfolios. 'AAA' scenario default rate is the gross default rate stress we would apply to model a 'AAA' rating scenario. Source: S&P Global Ratings.



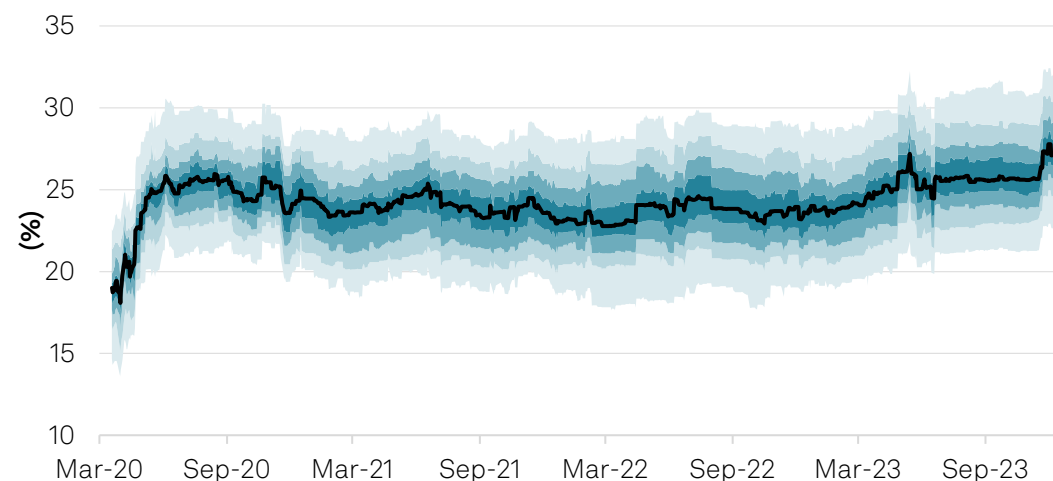
# Key Credit Metrics For CLO Portfolios Still Seeing Little Deterioration

- Across the European CLOs that we rate, the median exposure to obligors rated in the 'CCC' category remains stable at close to 4%, and there are very few transactions where this statistic is higher than the 7.5% threshold above which some assets are carried at market value in overcollateralization tests.
- Given current macroeconomic pressures, the pool of obligors currently rated 'B-' could be a source of future migrations to 'CCC'. These obligors typically account for 25%-30% of the portfolios backing CLOs and the 'B-' portfolio share has recently been rising.

European CLO exposure to 'CCC' category obligors



European CLO exposure to obligors rated 'B-'

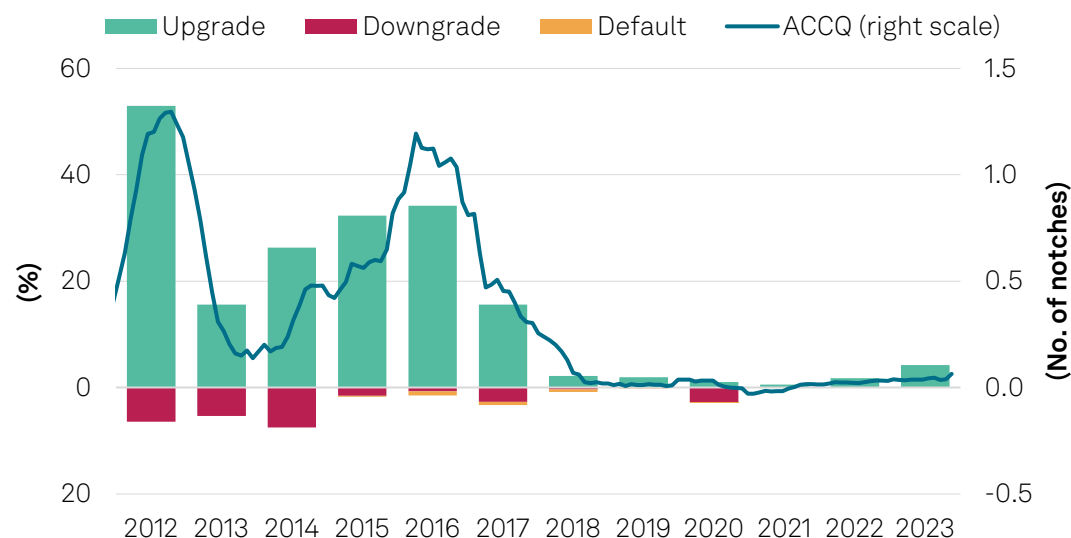


Solid line is the median, with each band representing a decile, from 10th to 90th percentiles. Estimates based on portfolios from latest available trustee reports, with ratings updated. Source: S&P Global Ratings.

# CLO Ratings Have Been Stable; 'AAA' Is Robust, Even In Severe Scenarios

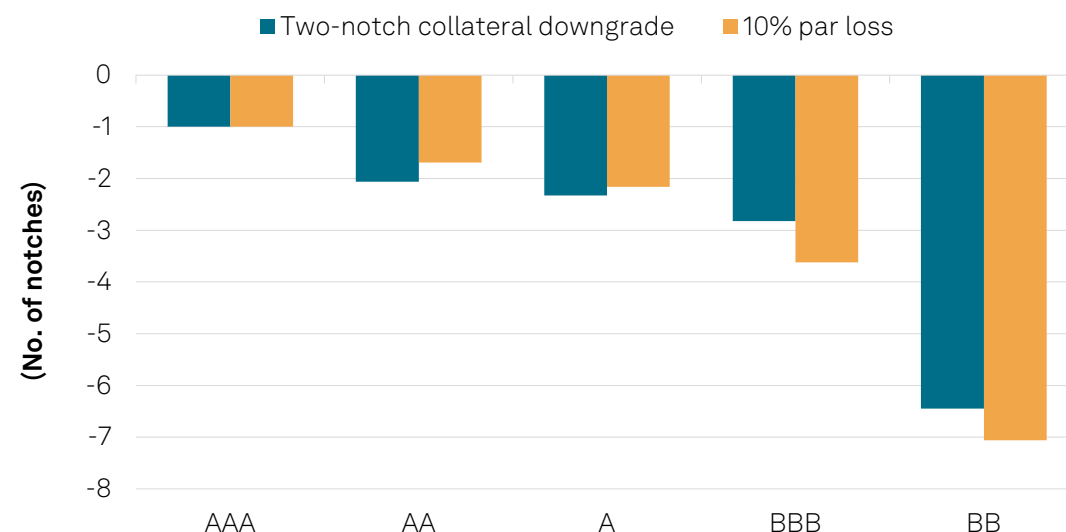
- European leveraged loan CLOs have seen very few ratings migrations over the past five years--even through the pandemic--partly due to collateral managers' ability to actively trade out of credits and sectors should they come under stress.
- Even under severe hypothetical scenarios--such as a uniform two-notch downgrade of all underlying obligors or 10% par losses in the portfolio--European CLO tranches currently rated 'AAA' would typically only see their ratings lowered by a single notch.

## CLO transition rates and change in credit quality



ACCQ--Average change in credit quality, i.e., the average number of notches by which ratings changed over a trailing 12-month period. Downgrades exclude defaults. Source: S&P Global Ratings.

## CLO scenario analysis, average rating change



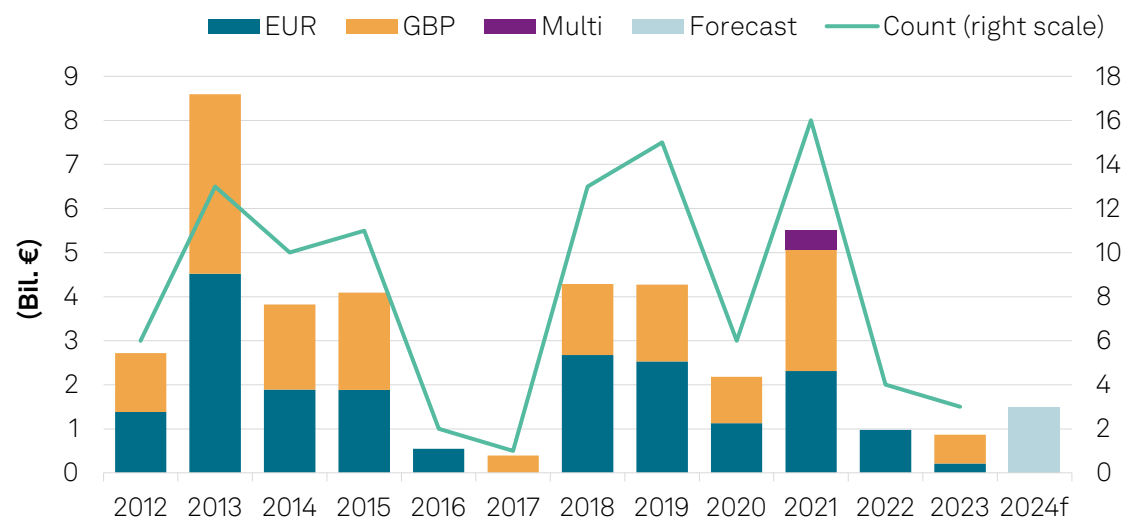
Scenario analysis based on the universe of reinvesting European CLOs that we rate, as of September 2022. Explore full scenario analysis results with our [interactive dashboard](#). Source: S&P Global Ratings.

# CMBS

# CMBS Issuance Prospects Set To Remain Limited

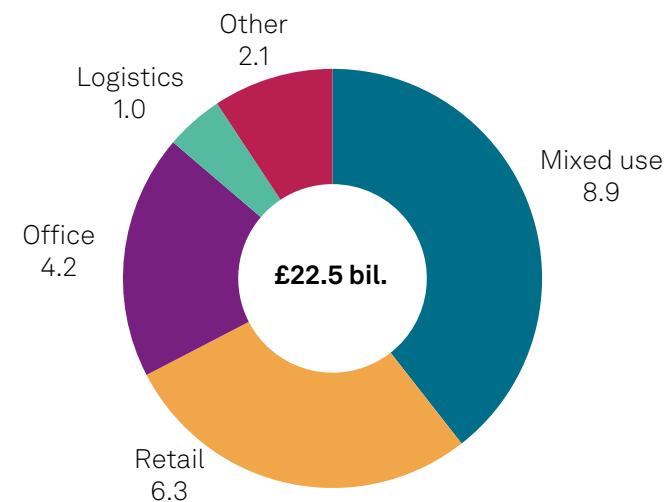
- In 2023, European CMBS issuance remained subdued at less than €1 billion, with only three transactions closing.
- That said, this limited activity was all in the second half of the year, after no issuance for 15 months, implying better momentum.
- Our outlook for 2024 continues to be relatively bleak, although it is possible that greater interest rate certainty and a bottoming out of commercial real estate prices may lead to a modest pickup in volumes from recent lows.

European CMBS issuance, by currency format



f--Forecast. Investor-placed issuance only. Source: S&P Global Ratings.

European CMBS outstanding, by collateral type (bil. £)

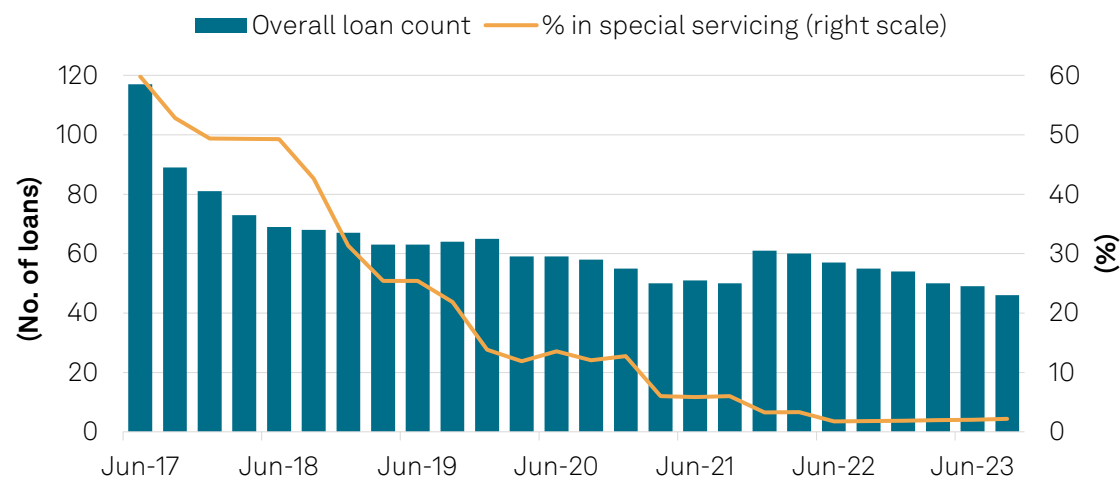


Outstanding balances as of Sept. 30, 2023, and rated by S&P Global Ratings. Source: S&P Global Ratings.

# Few Loan Defaults So Far, Although Refinancing Remains A Risk For Some

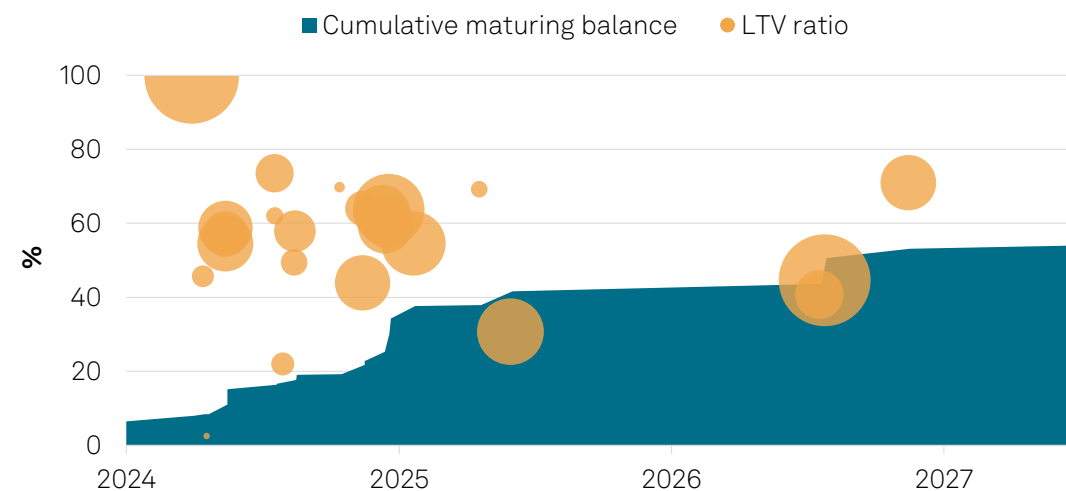
- The number of loans in special servicing remains low as some maturing loans were extended and less leveraged loans were repaid.
- Many more loans mature by the end of 2024 and particularly those with higher loan-to-value ratios are susceptible to refinancing risk.
- That said, when the underlying real estate is appraised at current market values, most maturing loans have a loan-to-value ratio of less than 60%, meaning that while defaults may rise, widespread losses are unlikely.

## European CMBS loans in special servicing



Based on loans backing European CMBS that we rated as of Sept. 30, 2023. Source: S&P Global Ratings.

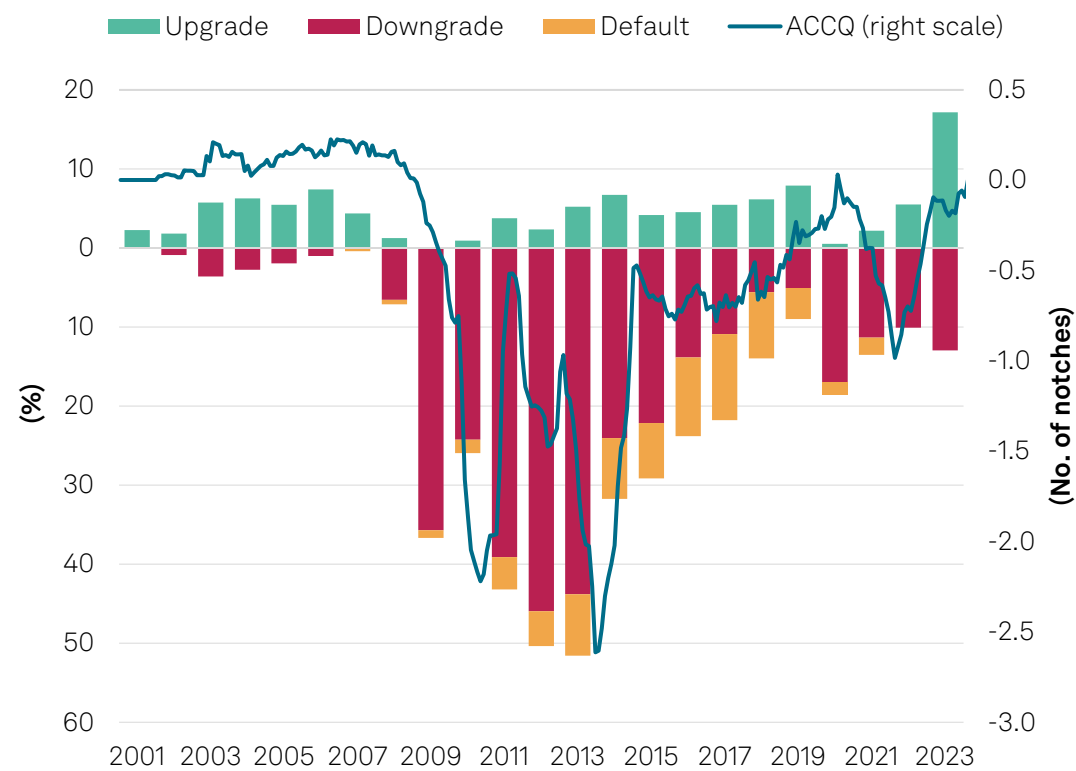
## European CMBS loan maturity profile



LTV--Loan to value. Bubble size corresponds to loan balance. Based on loans backing European CMBS that we rated as of Sept. 30, 2023. Source: S&P Global Ratings.

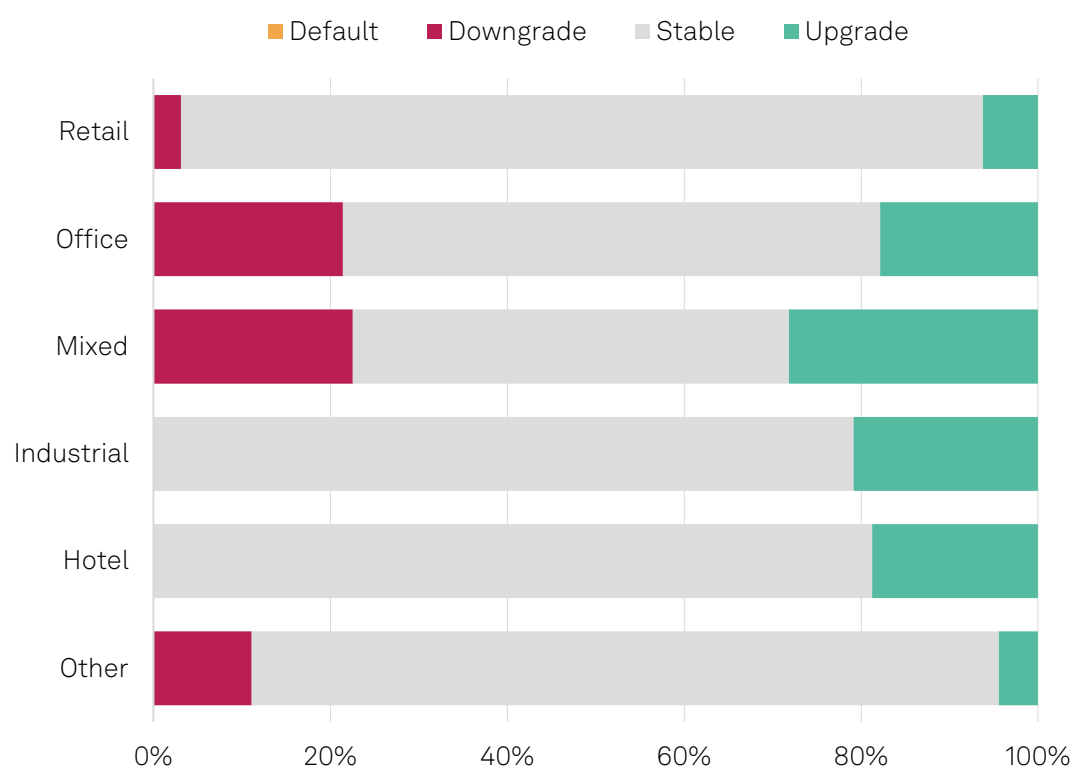
# CMBS Ratings Movements Mixed, With More Upgrades Due To Repayments

CMBS transition rates and change in credit quality



ACCQ--Average change in credit quality, i.e., the average number of notches by which ratings changed over a trailing 12-month period. Downgrades exclude defaults. Source: S&P Global Ratings.

CMBS subsector rating transitions, 2023



Downgrades exclude defaults. Source: S&P Global Ratings.

# Recent Research & Contacts

# Links To Recent Research

- [U.K. RMBS Is Set To Withstand Payment Shock](#), Dec. 11, 2023
- [Sustainability Insights: Electric Vehicles Amp Up European Auto ABS Risk](#), Nov. 29, 2023
- [European RMBS Index Report Q3 2023](#), Nov. 21, 2023
- [A Primer On European Auto ABS](#), Nov. 21, 2023
- [Credit FAQ: Is There A Middle Ground For European Middle Market CLOs?](#), Nov. 16, 2023
- [European Auto ABS Index Report Q3 2023](#), Nov. 9, 2023
- [European And U.K. Credit Card ABS Index Report Q3 2023](#), Nov. 9, 2023
- [Credit FAQ: How Do Product Switches Affect U.K. RMBS?](#) Oct. 30, 2023
- [Credit FAQ: How We Analyze Credit-Linked Notes Referencing Credit Derivative Definitions And Documentation](#), Oct. 26, 2023
- [European CMBS Monitor Q3 2023](#), Oct. 25, 2023
- [EMEA ABS And RMBS Counterparty Monitor Q3 2023](#), Oct. 25, 2023
- [A Primer On Ireland's RMBS Market](#), Oct. 13, 2023
- [Asset Price Risks: Overvaluation Persists For Europe's RMBS And Covered Bond Markets](#), Oct. 4, 2023
- [CLO Pulse Q2 2023: The 'Snooze Drag' Takes Hold In Europe](#), Sept. 28, 2023
- [Scenario Analysis: Will Lower EBITDA Recovery Leave U.K. Pub Corporate Securitizations In The Cellar?](#) Sept. 18, 2023
- [A Primer On France's RMBS Market](#), Sept. 13, 2023



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