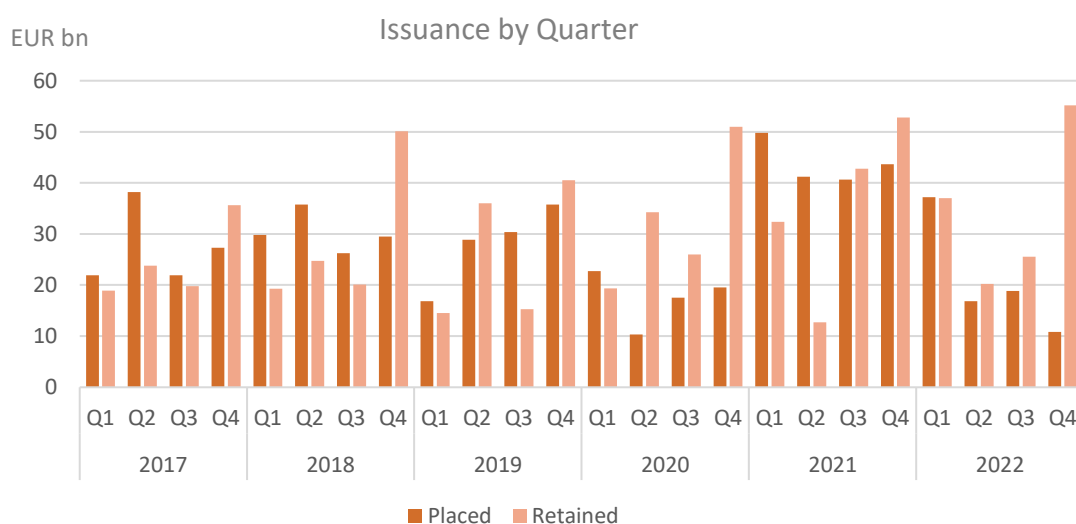


European Structured Finance 2022 in Review

- ❖ Issuance slows across sectors, asset performance to be tested
- ❖ CLO sales down over EUR12bn versus 2021
- ❖ UK specialist lenders underpin RMBS, prime volumes limited
- ❖ German issuers lead auto ABS again
- ❖ Retained volumes outpace placed tranches

- This year began well for the new issues market with around EUR28bn placed in January and February across all asset classes, versus around EUR31bn in 2021. However, Russia's invasion of Ukraine in late February dramatically changed the outlook. As well as the human cost there have been wide-ranging implications for economic growth, prices (energy as well as goods), food supply, component shortages, interest rates and the outlook for the next couple of years.
- It was not just the Ukraine war which rattled markets, as the UK's so-called 'mini budget' on 23 September had a massive impact. UK pension funds scrambled to position and protect themselves, in some cases offloading huge quantities of bonds to raise cash. Gilt yields surged, credit spreads spiked and the Bank of England stepped in with emergency purchases.
- Inflation hit multi-decade highs across the globe and central banks have attempted to combat this with higher rates. Inflation is edging lower, but this may not be entirely down to central banks' efforts as improved energy security has allowed prices to settle.
- On the investment side, higher rates have translated into better returns for buyers of floating rate products and there is still some way to run with rates not yet at their peak.
- The tricky market conditions meant pre-/private placements dominated syndication strategies for large parts of the year as they allowed issuers to secure full coverage of their transactions. Some sellers did, however, announce deals as fully covered but kept books open for the wider investor base to boost orders and try to squeeze pricing.
- In 2021 placed issuance topped EUR40bn in each quarter across all asset classes but in 2022 that level was not achieved even once, the closest being Q1 with EUR37bn.

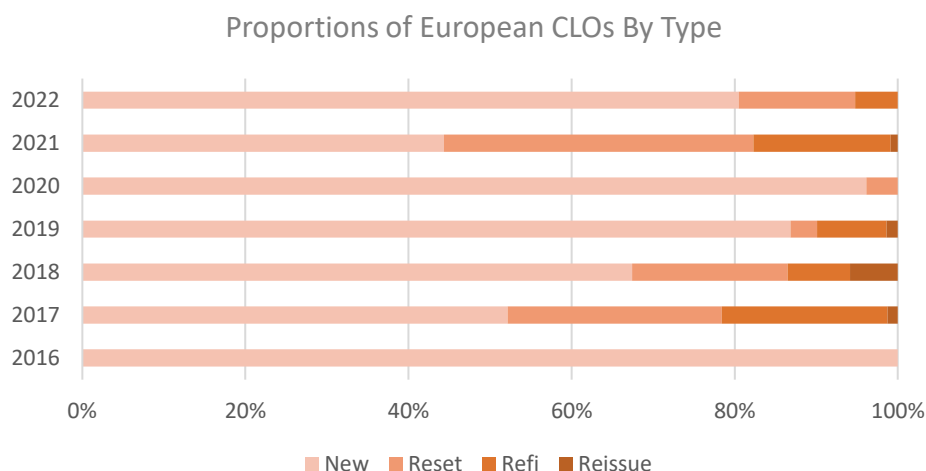


New CLOs Slow, Down 33% on 2021

- A slower CLO market in 2022 saw new issue volumes over EUR12bn lower than in 2021, with around EUR26bn issued versus EUR38.6bn a year earlier.
- In tougher conditions average non-call/reinvestment periods shortened and par subordination rose. Other adaptations to navigate volatility included a “print and sprint” strategy or delayed draw tranches, enabling the sale of the most junior tranche at a later date if required.
- And there was the increased usage of static portfolios. Seven static deals priced in 2022 after only two each in 2020 and 2021. Palmer Square printed three of the seven, having sold all four in the last two years. AXA, Napier Park, Onex and Sound Point issued the rest.
- Wider spreads made reset and refinancing uneconomical. Eleven resets priced in 2022 for EUR4.6bn with Triple A spreads in a range of 3mE+92bp to 117bp. The last was on 29 April. Just five deals were refinanced, all in January, for EUR1.7bn (four at 82bp and one at 81bp).
- By comparison, in 2021 EUR41.3bn of resets printed via 98 deals and EUR19.3bn of refis from 62 trades, as well as EUR0.8bn from two reissues as the tighter spreads permitted more repricing. This took total leveraged loan CLO supply in 2021 to around the EUR100bn mark, while in 2022 it collapsed to around EUR33bn.



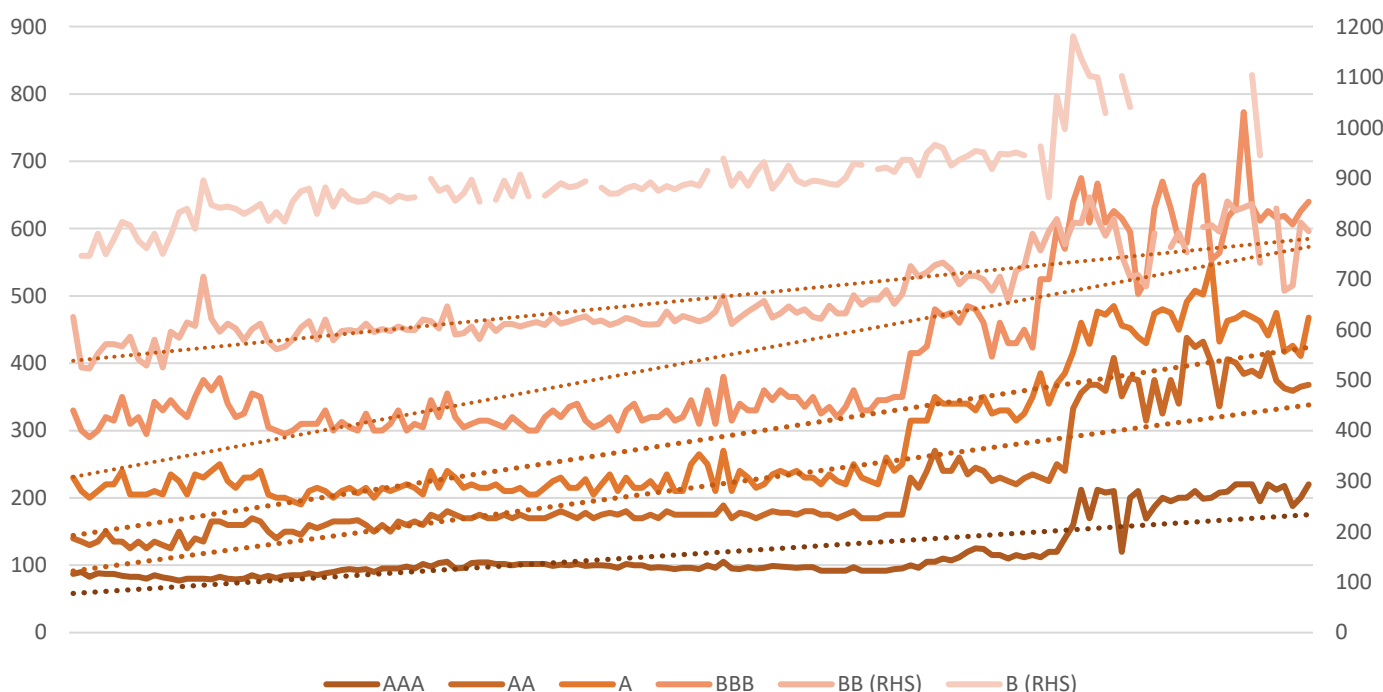
- The lack of reset and refi opportunity meant new issues dominated the market this year, accounting for over 80% of volume, versus 44% in 2021.



Wide CLO Coupon Variation

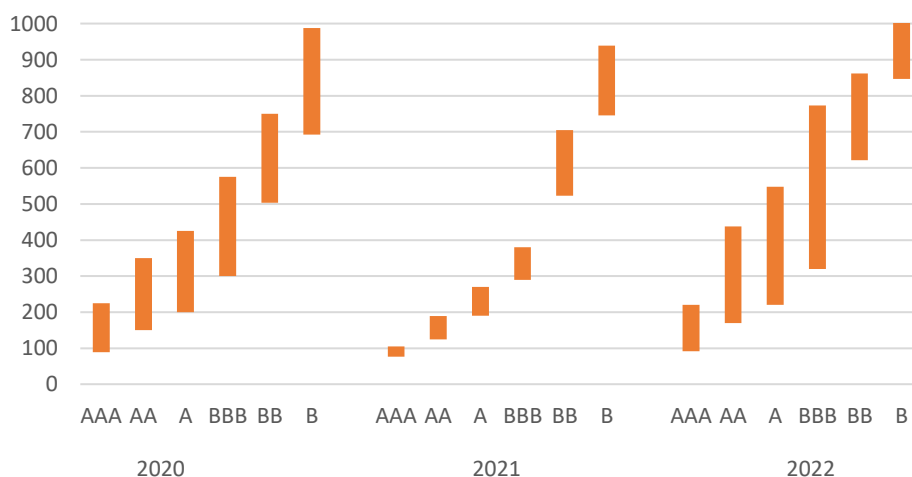
- Triple A CLO coupons were last below 100bp in late March and several deals priced around the 220bp mark towards the end of the year (one at 235bp margin after coming at a discount). The chart below shows spread progression since the beginning of 2021 and the various gaps in the Single B line shows the extent to which managers dropped the lowest-rated tranche.
- This is either due to a delayed draw strategy (not selling them at launch) or just not including them in the capital structure at all. Nearly one-third of all new deals (around 20 deals) pricing in 2022 did not have a Single B tranche at issue. In 2021 just seven of the 94 new deals did not sell a Single B bond (six deals did not have one and one was retained).

New European CLO Coupons (bp)



- Coupon variation was greater than in 2021 but less than 2020. Triple As ranged from 92bp to 220bp (a 128bp gap) versus 89bp and 225bp in 2020 (136bp difference). Not all DMs or prices were disclosed on transactions (one Single B did print at 1500bp though) and so the exact spread movement is difficult to determine, but the coupon variations are sizeable.

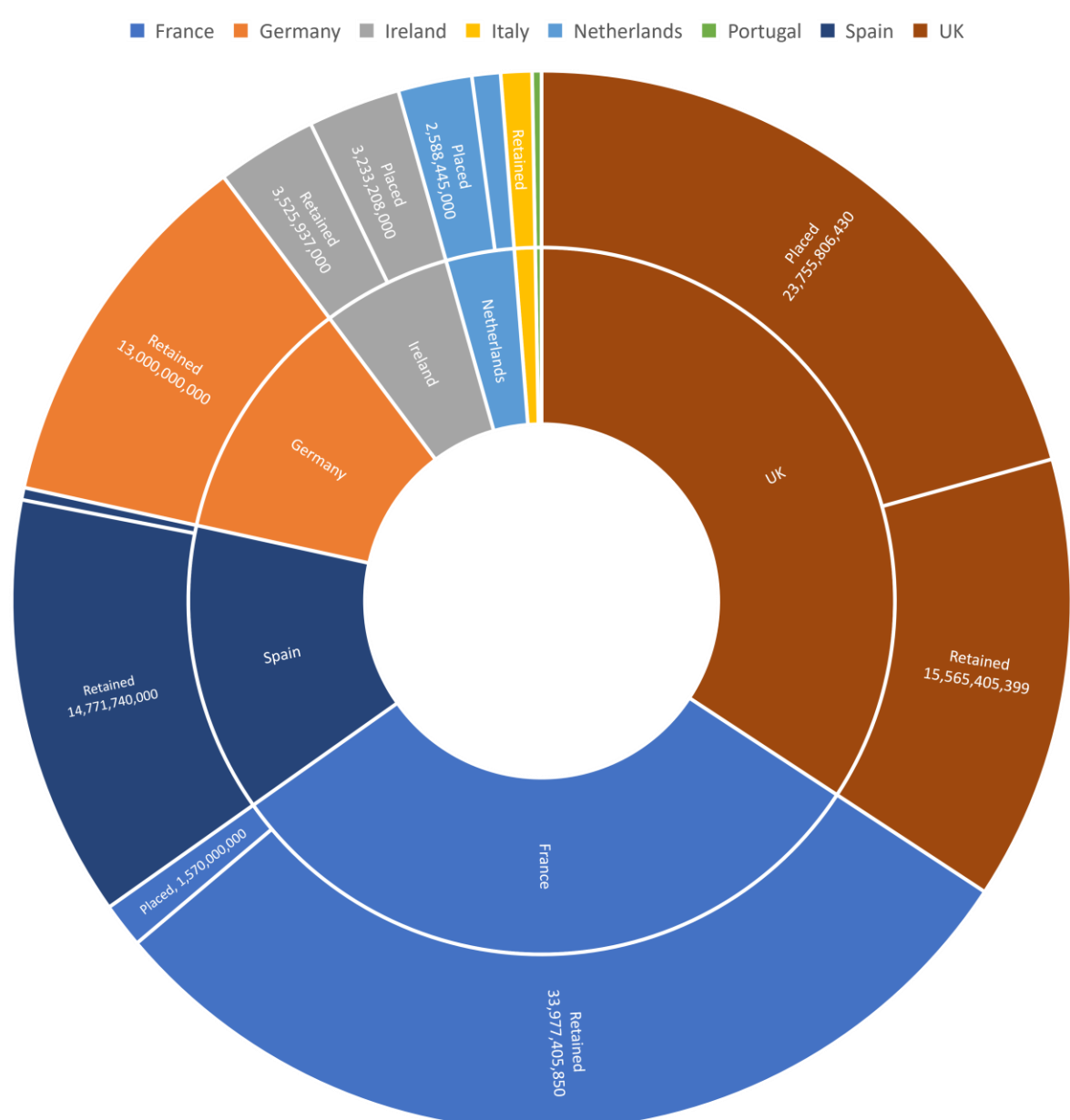
New Issue CLO Coupon Ranges by Rating Bracket (bp)



UK Still Leading RMBS

- As has been the case for several years, UK RMBS dominates the volume charts, led by the specialist lenders with prime STS trades outnumbered. Of the GBP20.2bn of UK RMBS sold to investors, just GBP3.5bn or 17% was in STS format from six trades.
- The 2022 total of EUR114bn equivalent across placed and retained tranches is the highest RMBS tally since 2011 according to IGM data, with retained deals dominating. The last time that overall tally was beaten, some EUR170bn was structured, but then EUR56bn was placed.
- On a EUR equivalent basis, around EUR31.6bn was placed with investors while EUR83bn was retained. UK deals accounted for 75% of sales (EUR23.8bn). In second place was Ireland with over 10% (EUR3.2bn), followed by the Netherlands with more than 8% (EUR2.6bn), France with 5% (EUR1.6bn) and Spain with 1% (EUR0.4bn). France accounts for a large share of overall supply due to some multi-billion home loan structures.

2022 RMBS by Country and Placement Status

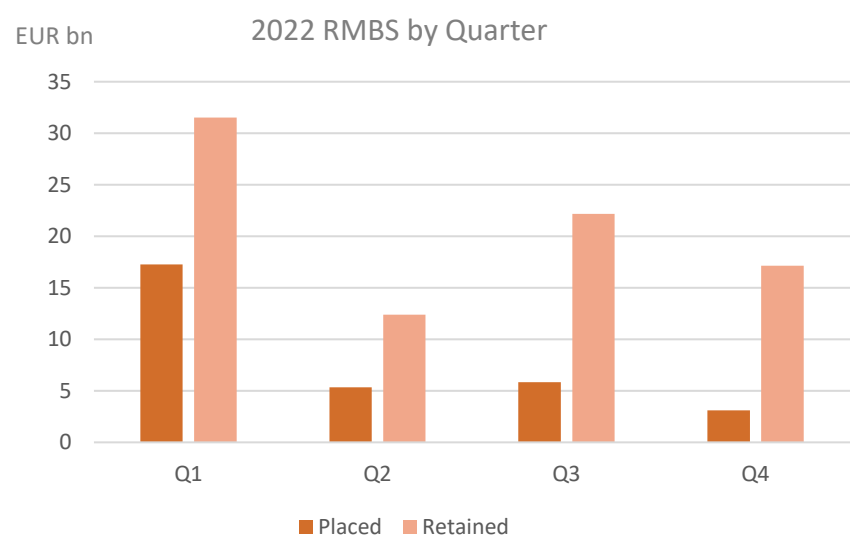


Source: IGM Credit Database

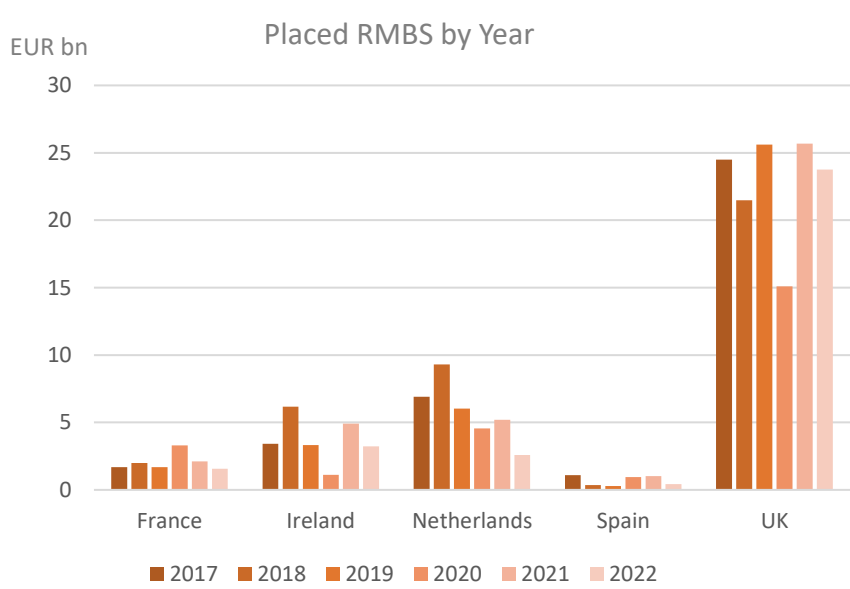
sales@informagm.com

RMBS Starts Well But Volumes Dwindle

- As with most asset classes the year began well for the RMBS sector. Placed sales in Q1 of over EUR17bn equivalent were recorded, which worked out to over 50% of the entire year's supply.
- Towards the back end of Q1 quarter pre-placements became more commonplace, as the invasion of Ukraine in late February unsettled markets and led to sellers seeking more certainty of execution when bringing deals to market.
- Issuance in subsequent quarters was disappointing, only edging past EUR5bn in Q2 and Q3 while in Q4 sales only just crossed EUR3bn equivalent, and that included Nationwide Building Society's upsized GBP750m prime transaction.



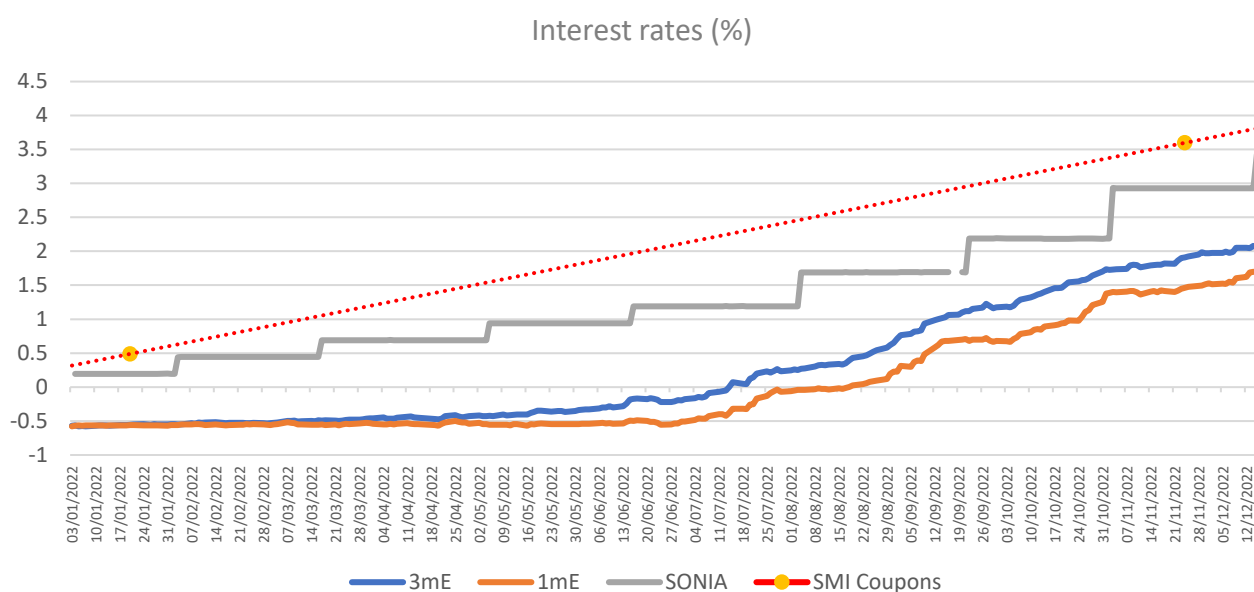
- The chart on the previous page shows the proportion of placed bonds by country, but the graph below illustrates just how dominant the UK is. Issuance in this year did include the refinancing of some bulky transactions (GBP7.7bn from Harben Finance and Ripon Mortgages), but even without those the UK would still be in the lead.



Source: IGM Credit Database

Challenges For Mortgage Markets, Spreads Rise

- Several sectors of the market are braced for a challenging 2023. House prices are expected to cool across Europe or drop in some jurisdictions while asset performance is likely to come under stress due to higher unemployment and the rising of cost-of-living, particularly in the more challenging areas of non-conforming lending or those that are deemed re-performing.
- Earnings are rising but lag inflation (one of the drivers of employee strike action across Europe) and so real income is falling. It may get worse given that rates have not peaked. Recent inflation prints have cooled by more than forecast but are still persistently high.
- The Bank of England estimates a 33% increase in mortgage payments for four million borrowers next year. BTL borrowers face higher costs too but can hike rents to offset the increased mortgage rate. But that has its own risks to the economy as renters may cut back on other expenditure which would deepen the consumption contraction or even cause defaults on other debts, thus exacerbating the downturn.
- Higher interest rates do, however, mean higher returns for investors in the predominantly floating rate European ABS market. This year 3m Euribor has risen from -0.57% to a high of 2.081% and 1m Euribor went from -0.576% to a high of 1.748%. SONIA shot up from around 0.195% to a high of 3.4273%
- To take one example, Nationwide Building Society printed Silverstone 2022-1 in January with a GBP500m 4.93-year Triple A at SONIA+29bp, when SONIA was around 0.2%. In November SONIA had increased to 2.93% and on 24 November Nationwide priced series 2022-2 with a GBP750m 3.96-year Triple A at SONIA+67bp, equating to a coupon more than 3% higher than in January. SONIA then hit a 2022 high of 3.4269% on 15 December.
- The chart below plots those two points as the deals priced. And it is a similar situation for EUR deals where some Triple A RMBS yields have jumped by well over 2% this year due to ECB hikes. Given that Euribor was deeply negative at the start of the year, some deals priced significantly above par for the DM to reflect the prevailing spread and investor demand.



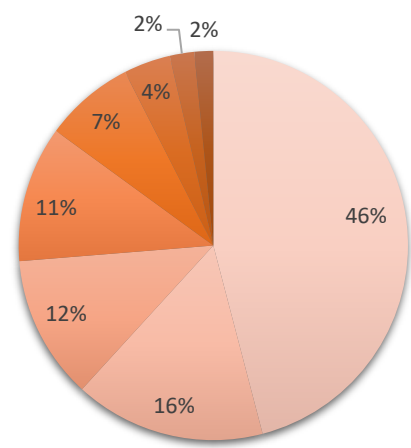
Source: Bloomberg/IGM Credit Database

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Auto ABS Slows

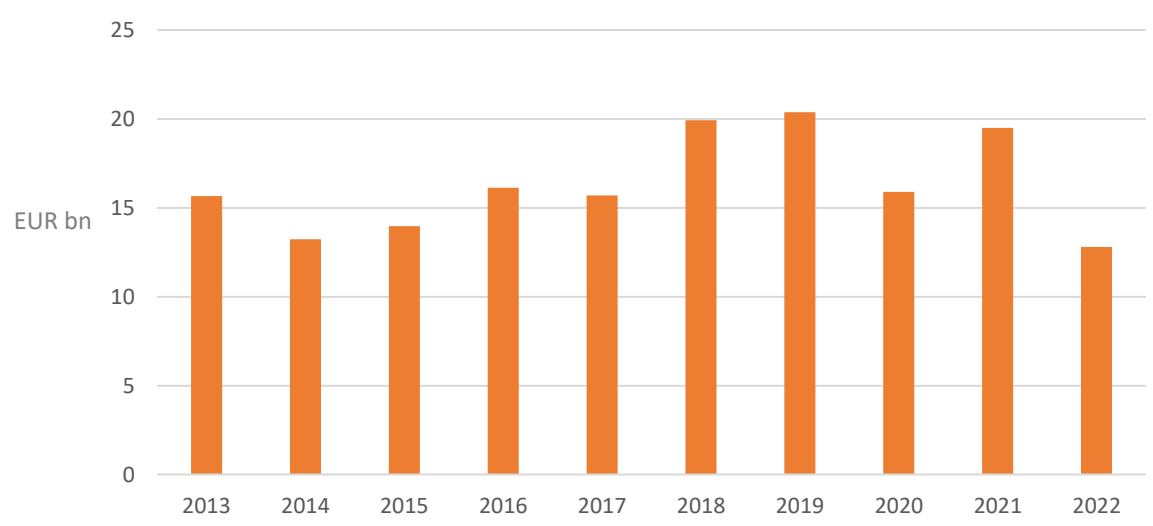
- Europe’s auto ABS market slowed in 2022 with a 35% drop in public placement volumes versus 2021, at just under EUR13bn versus EUR19.5bn. Placed bonds are at the lowest level in the last ten years.
- Issuance had recovered last year from the Covid lockdowns of 2020, but there were supply chain issues and substantial declines in new origination levels across Europe during the early part of the year which stymied activity.
- The recent new car registration numbers are more encouraging. And while a shortage of new vehicles has supported second-hand car prices (and residual values) the sector may experience a deterioration in performance in 2023, as with many other consumer areas.
- Issuance was recorded in eight separate jurisdictions, down from 11 in 2021. German originators maintained a healthy lead over the competition, accounting for 46% of placed volumes (EUR6bn) with Spain around 30ppt back at 16% in second place (~EUR2bn). Nonetheless, German issuance was still 22% lower than the EUR7.7bn placed in 2021.

2022 European Auto ABS



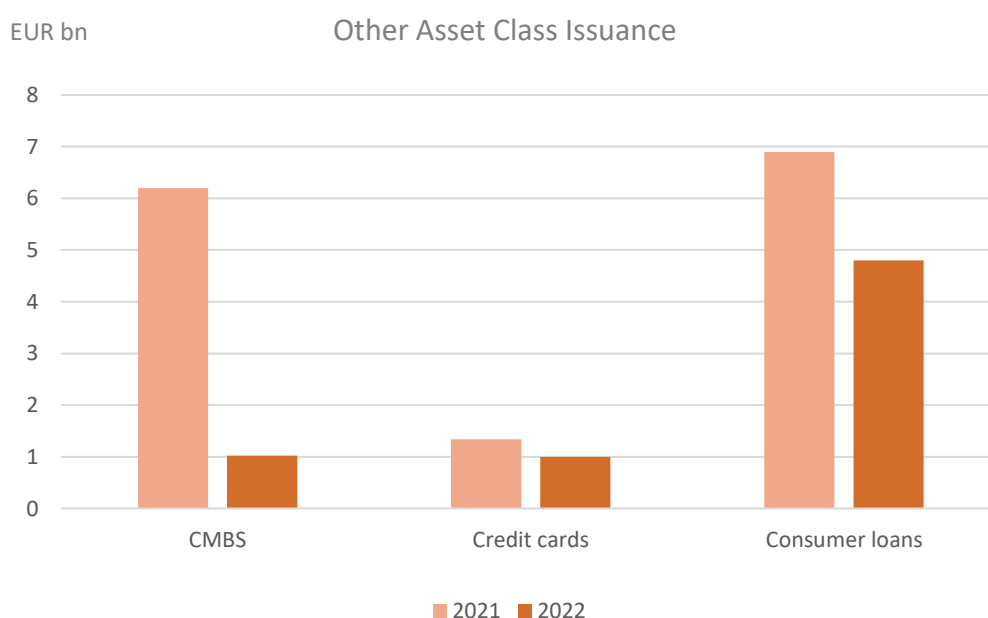
Germany Spain Finland France UK Netherlands Switzerland Portugal

Public auto ABS



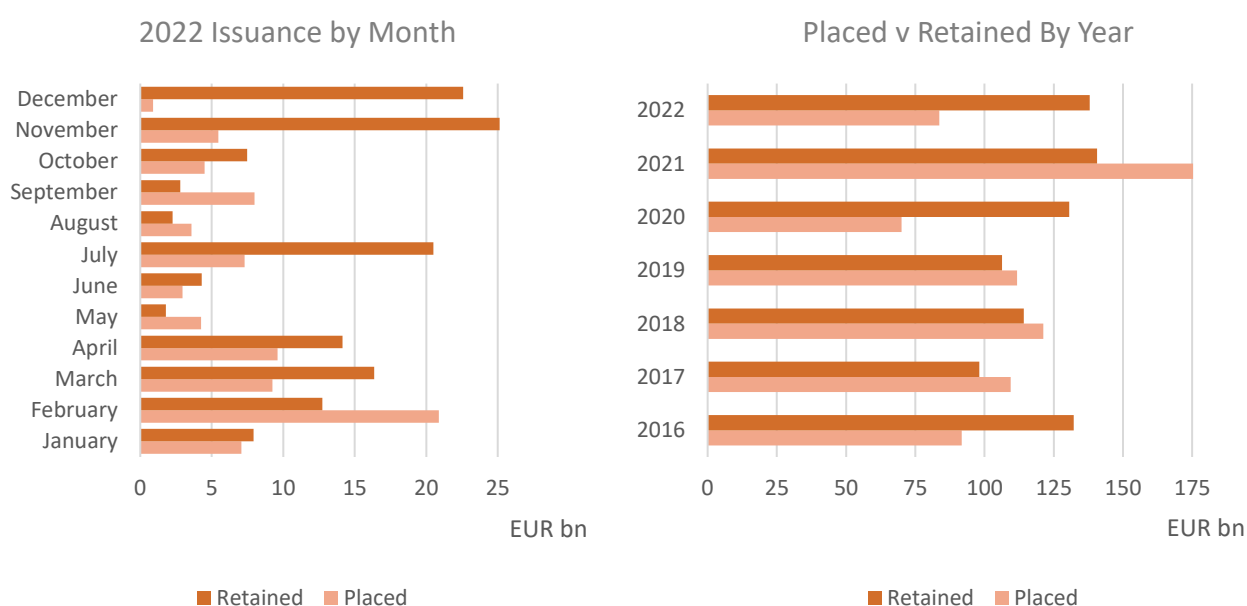
CMBS, Cards and Consumer Loans Tail Off

- Europe's CMBS market got off to a decent start in 2022 with five deals in the first five months, but that was the last of the public activity as widening spreads impacted the viability of transactions. There could have been a sixth transaction, but HSBC pulled its student accommodation deal in May due to market conditions.
- Issuance topped EUR6bn in 2021, raising hopes for sustained supply in 2022 but market conditions ruled otherwise. Barclays closed a mixed portfolio deal in December, pooling 95 loans in a substantial GBP3.5bn trade but no marketing announcement or pricing information was disclosed.
- In other sectors, there were five credit card deals. Three of those came from the UK via NewDay Ltd. Carrefour Banque (French trade) and Swisscard AECS (Swiss deal) provided the rest. Around EUR1bn equivalent of cards ABS was placed, down 25% versus 2021. In 2020 around EUR1.1bn was issued, some EUR1.9bn in 2019, a recent high of EUR3.5bn in 2018, EUR1.4bn in 2017 and EUR1.6bn in 2016.
- Consumer loan ABS yielded around EUR4.8bn of sales, some EUR2bn short of the EUR6.9bn printed in 2021 but nearly double the EUR2.5bn issued in 2020. Issuance was around EUR4.9bn in 2019, EUR2.3bn in 2018, EUR3.5bn in 2017 and EUR5.8bn in 2016.
- Each of these sectors has its own asset performance concerns in the coming year. Fitch said recently that tightening household finances would impact the performance of unsecured loans and credit card assets more than autos, with the latter benefiting from high used car prices which supports residual values.
- Assets exposed to refinancing and floating rate risk were the most at risk, among which retail or unhedged CMBS transactions were vulnerable, the agency said.
- Inflationary pressures and rising rates, rising costs, labour market stress and tightening financing conditions all affected households and businesses, the agency said.



Placed vs Retained

- Placed volumes beat retained deals in four of the 12 months of 2022, but there were some substantial months for deal retention. Over EUR25bn was retained in November and over EUR21bn in the first three weeks of December.
- With around EUR84bn placed across all asset classes in 2022 and EUR138bn retained, it means over EUR1.6 of bonds retained per EUR1 sold, which is the second highest ratio in the last seven years (beaten by 2020 when EUR1.9 per EUR1 was retained).



- As can be seen below, December is not usually the strongest month for new issuance but this year has been particularly slow, although not entirely unsurprising given market conditions.

