# Creditreform C Rating

## Recent Developments in the European Car Market and Auto ABS Issuance Activity

2023

Financial Research September 2023



# Creditreform ⊆ Rating

#### **Management Summary**

#### 1.

Amid the COVID-19 pandemic, semiconductor chip shortages severely impacted the automotive industry, hindering vehicle production. However, in 1H23, the crisis' worst effects subsided, allowing the automotive sector to find stability. European (EU-27 plus the UK) and US car markets experienced significant rebounds, with European new passenger car registrations rising by 18.1% y-o-y in 1H23 due to increased availability, and attractive incentives. The US saw a 9.8% y-o-y increase in new-car sales, driven by clearance of order backlogs due to chip shortages. China's new-car sales rose by 8.8% y-o-y in the same period, attributed to strategic policies, marketing efforts, and new models. India's passenger car sales also surged by 10.0% y-o-y, driven by Sports Utility Vehicles (SUV) and Multi-Purpose Vehicle (MPV) demand, while small car demand remained subdued.

#### 2.

Despite several challenges, the automakers' efforts to transition towards a greener environment were evidenced by a notable rise in the electric vehicle (EV) segment. During 1H23, the EV market share expanded rapidly as it inched towards 47%, primarily driven by hybrid electric vehicles (HEVs). HEV registrations posted a 28% y-o-y growth, marking a notable market share expansion and maintaining their position as the second most preferred option among new car buyers. By contrast, diesel-based cars suffered steep losses in market share.

#### 3.

Production volumes of passenger cars recovered in 1H23 but remained way below pre-pandemic levels despite easing supply chain constraints of some of the critical primary and intermediate components. The UK posted a strong first half, with production up nearly 11% y-o-y. However, it still lags behind the 1.5mn or more cars produced in the years before the pandemic. Meanwhile, Germany's production volumes surged by 32% y-o-y but were 10% lower compared to pre-pandemic levels.

#### 4.

In 1H23, the used car market saw growth in four out of five major European markets. However, the recovery was slower than new cars due to distinct buyers and enticing incentives extended for the purchase of new cars. France's volumes declined, while Germany, Italy, and the UK grew over 4%, aided by improved supply chains. Notably, prices

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have maintained their stability, although used cars are consistently changing hands at levels lower than the peaks seen in 2022.

#### **5**.

Auto ABS issuances amounted to 10.15bn euros in 1H23, contracted 7.3% y-o-y. The issuance volume continued to decelerate and was the second lowest, only to the 1H19 level in over a decade. Germany's market share, although decreasing, has continued to dominate, with issuances close to one-third of the total. The UK regained momentum, reaching a 15% market share. Spain and France's primary issuance shares observed a decline while Portugal's issuance volume pushed peripheral European nations' shares up, indicating a slight change in the issuance landscape.

#### 6.

Captives' market share of new issuance volumes during 1H23 shot up to 65%, converging towards the long-term average. Volkswagen dominated as an auto ABS originator, Toyota came into the European market after long whereas BMW, Renault, and Ford were active during the first half of 2023. Meanwhile, non-captives showcased a declining trajectory, with market share falling to 35% of the total volumes and were largely led by BNP Paribas.

#### **7**.

The cumulative share of AAA/Aaa-rated issuance has been shrinking gradually in the past few years, however, this year's issuance looks promising, with the share now at 74% reflecting strong issuance volumes from Germany, France, and the UK. The share of AA-rated issuances remained notable at 21%. While volume at the lower end of the investment grade category (BBB/Baa) and below went sub-par 1%, levels last observed in 2018.

#### 8.

Going ahead, Europe's economic outlook remains partly under the impression of elevated uncertainty related to the unpredictable events around the war in Ukraine. However, European economies have made good progress in adapting to these challenges, and supply-side challenges that started last year and trickled down in the first half of 2023. Despite the hurdles expected in the latter half of this year, there is an anticipation of growth in car sales. Consequently, new Auto ABS issuance in the primary market is expected to remain stable. Robust pricing trends in both the new and used-car markets, as well as some resilience in demand – not least against

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a backdrop of positive labor market conditions – support this expectation. Moreover, low default rates and high residual values still maintain investor interest.

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## 1. The European Car Market at a Glance

The COVID-19 pandemic had a profound impact on the availability of semiconductor chips, resulting in far-reaching consequences for the automotive industry. However, as we enter 2023, the most severe consequences of this crisis have begun to subside, and the automotive sector has managed to establish a new equilibrium. In essence, the scarcity of semiconductor chips that severely hindered vehicle production throughout 2021 and 2022 has now become less prominent, enabling the industry to regain stability. Despite ongoing macroeconomic concerns related to elevated inflation, rising interest rates, lingering geopolitical risks due to the war in Ukraine, and supply chain constraints, automakers and suppliers have shown resilience by adapting to the current environment.

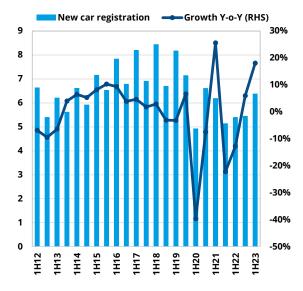
In **Europe**, the semiconductor shortage, a significant concern for European automobile manufacturers, eased at the beginning of 2023. Automakers capitalized on the situation by revamping their production capacity. As a result, the European market (i.e. the EU-27 plus the UK) witnessed a significant 18.1% y-o-y surge in new passenger car registrations to 6.39mn units in the first half of 2023 (see Figure 1), compared to a 14% drop in the corresponding period for 2022. The surge in demand was fueled by a combination of factors, including increased availability of models at better prices coupled with attractive incentive packages across all markets.

Even the **US** reported a notable surge in new passenger car sales, which increased by 9.8% y-o-y, reaching a total of 1.57mn units. The growth was attributed to the clearance of order backlogs that had accumulated for nearly two years amid the global computer chip shortage,

which had significantly impacted factory operations and constrained supply.

Figure 1: European new car registrations witnessed green shoots in 1H23

New car registrations in mn units, including the UK



Source: ACEA, Creditreform Rating

China's passenger car sales increased 8.8% y-o-y to 11.27mn units in the first half of 2023, as per the China Association of Automobile Manufacturers (CAAM). The performance was primarily driven by strong demand in China's automotive sector, influenced by a strategic shift in promotional policies and price fluctuations during the first quarter of 2023. Furthermore, the gradual recovery can be attributed to a combined effort of central and regional consumption policies, extensive regional automobile marketing initiatives, and the mass introduction of new models by automakers.

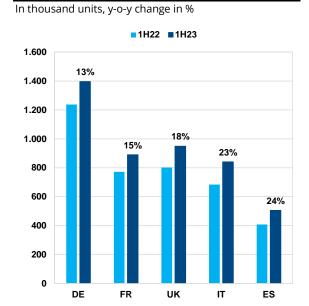
**India's** passenger vehicle sales also reported an upbeat performance, with new car registrations increasing by 10.0% y-o-y to 2.01mn units, according to the latest automobile production data by the Society of Indian Automobile Manufacturers (SIAM). The performance was attributable to the surging demand for Sports Utility Vehicles



(SUV) and Multi-Purpose Vehicle (MPV), as demand for small cars remained tepid.

Zooming in on Europe, **UK** passenger vehicle sales surged 18.4% y-o-y (see Figure 2). The battery electric vehicles (BEVs) segment witnessed the most significant growth with a remarkable 32.7% y-o-y increase. Diesel cars lost ground due to heightened demand for EVs. Nonetheless, to achieve environmental targets, the adoption of EVs will need to accelerate beyond the current growth rate. This will require a comprehensive approach that includes incentives, bolstered consumer confidence in purchases, and the establishment of a robust charging infrastructure to facilitate sustained and affordable usage of EVs.

Figure 2: Double-digit growth in new passenger car registrations across all major European economies

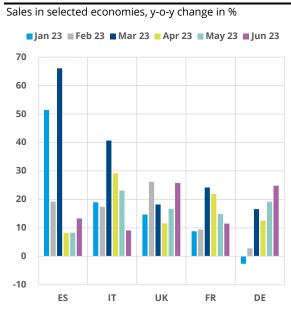


Furthermore, demand in **Germany** solidified with a 12.8% y-o-y increase in new passenger vehicle registrations in 1H23 (see Figure 3). The positive momentum was underpinned by backlogged orders and low base values, coupled with

Source: ACEA, Creditreform Rating

the easing of supply chain constraints. In Germany, demand for hybrid electric vehicles (HEVs) was robust. In contrast, demand for plug-in hybrids (PHEVs) plunged mainly due to the removal of financial incentives for these vehicles at the end of 2022.

Figure 3: Easing supply issues boost sales



Source: ACEA, Creditreform Rating

Sales of BEVs continued to improve by 31.7% y-o-y to 220,244 units, although the German government reduced incentives for BEVs for 2023. For cars priced below 40,000 euros the incentives were lowered from 9,000 euros in 2022 to 4,500 euros in 2023. Similarly, for cars priced between 40,000 and 65,000 euros, the incentives decreased from 7,500 euros in 2022 to 3,000 euros in 2023. However, the German automotive industry is making great strides to promote and advance its electric mobility by significantly investing in its technologies and products. The German car manufacturers and suppliers thus plan to invest 250bn euros in research and development from 2023 to 2027.

In **Italy**, new car registrations grew by 22.9% yo-y in 1H23 as the supply chain and vehicle production improved. However, this was still lower



than the corresponding period in 2021, as potential buyers are currently holding back on their purchases, awaiting the revision of incentives for low-emission vehicles and the implementation of better charging infrastructure.

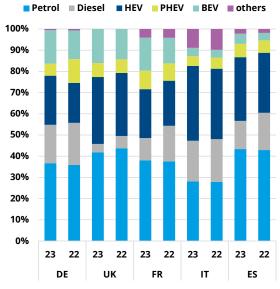
Meanwhile, thanks to higher demand for rental cars and improving car production, new car registrations in **Spain** increased by 24.0% y-o-y to 505,421 units in 1H23. In June 2023, the Spanish government also announced a tax rebate of up to 15% on the purchase of electric vehicles (EVs) with a maximum income tax deduction of 20,000 euros. This incentive is part of an 8.9bn euros anti-inflation package concerning the second half of 2023.

In **France**, sales of diesel vehicles declined by 27.8% y-o-y to 93,900 units, while demand for the HEV and BEV surged by 25.0% y-o-y and 47.8% y-o-y, respectively, in 1H23, strengthening their footprints on the back of subsidies provided by the French government. Moreover, the French government has revised automotive subsidies to pave the way for Europe's car industry to combat the potential threat of cheaper Chinese electric vehicle imports. EVs sold in France are eligible for incentives worth 5,000 euros per new electric vehicle costing less than 47,000 euros and weighing less than 2.4 tons. The revised French law is expected to be fully adopted by the end of 2023.

Overall, demand for BEVs experienced a remarkable upswing in Europe (see Figure 4) and reached a significant milestone by June 2023 as it surpassed diesel cars to secure the third place in new car buyers' preferences. This achievement led to a consolidation of market share, which increased from 10.7% in 1H22 to 15.1% in 1H23. Hybrid-electric cars maintained their position as the second most preferred option among new car buyers, constituting 24.3% of the market. Notably, petrol cars continue to dominate with the largest share, accounting for 36.3%.

Figure 4: Rising share of BEVs

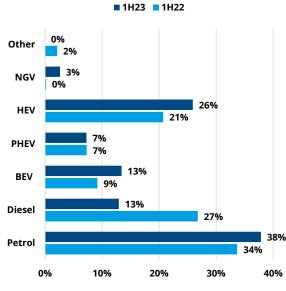
Percentage share in total new registrations, in the respective 1st half of a year



Source: ACEA, Creditreform Rating

**Figure 5: European Diesel sales plummeting** 

Percentage share in total new registrations (incl.-UK)



Source: ACEA, Creditreform Rating

The current market pattern shows that diesel is becoming less attractive to customers (see Figure 5), as the environmental impact of cars takes center stage. The European Automobile Manufacturers' Association (ACEA) reported a 49.5% y-o-y increase in BEVs to 856,551 units in 1H23.

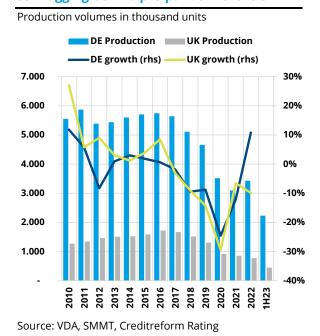
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Also, the number of new HEV registrations in Europe improved by 28.2% y-o-y to 1.7mn units in 1H23, attributable to strong demand from the most significant markets, Germany (+38.9%), followed by Italy (+30.3%), UK (+25.7%), and Spain (+31.7%). Going forward, the EU's ban on new petrol and diesel car sales by 2035 to achieve a net-zero emissions target by 2050 should further facilitate the sale of EVs.

In 1H23, there were notable developments in manufacturing of passenger cars, showing signs of recovery from the adverse effects of the global COVID-19 pandemic and supply-side shortages. Whilst production volumes of passenger cars experienced an upward trend, it's important to note that the production figures remained significantly below the levels observed in the years preceding the pandemic (see Figure 6).

Figure 6: Improving production volumes but still lagging behind pre-pandemic levels



One of the main factors contributing to the recovery in production volumes was the easing of supply chain constraints that had plagued the industry since the height of the pandemic. These constraints, particularly on critical primary and

intermediate components, had severely disrupted the manufacturing process. With the gradual resolution of these supply chain issues, manufacturers were able to resume and even expand their production operations, leading to the observed recovery.

The UK demonstrated a strong recovery in its passenger car production. With a y-o-y increase of nearly 11%, the UK's automotive sector showcased a positive trend. Despite this encouraging growth, it is noteworthy that the current production levels in the UK are still significantly below the benchmark of at least 1.5mn cars produced annually in the pre-pandemic years.

In parallel, Germany, a renowned automotive powerhouse, also witnessed a remarkable surge in production volumes (+32% y-o-y), reflecting the resilience of the German automotive industry in the face of challenges, but also the clearance of substantial order backlogs. However, despite impressive growth, Germany's production volumes remained 10% lower compared to the levels achieved before the pandemic. This disparity underscores the ongoing struggles faced by the industry in fully recovering its pre-pandemic production capacity.

#### **Used-car markets in Europe**

As Europe's new-car market makes a steady recovery with monthly increases in registrations, the used-car market in the region is also experiencing a resurgence following a tumultuous 2022. During 1H23, four out of the five largest European markets recorded growth in used-car transactions. The dynamics of the used-car market are closely intertwined with new-car registrations, as older vehicles traded in for more recent models eventually make their way to second-hand dealerships. Accordingly, the flow of models into the used market has increased, affecting the total number of transactions. Yet, the pace

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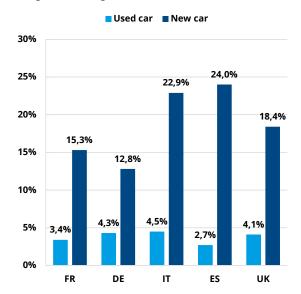


of recovery in the used-car market is lagging behind that of the new-car market.

This discrepancy can be primarily attributed to the distinct nature of buyers in the used-car realm. While a significant portion of new car registrations come from fleet and business acquisitions, these buyers rarely venture into the used-car segment. As a result, the majority of interest in used cars originates from private consumers. Amid an enduring cost-of-living crisis, the cost of acquiring a nearly new vehicle presents a challenge to many individuals.

Figure 7: Easing supply-chain constraints lead to improving performance in car markets

Used-car transactions and New car registrations, y-o-y change in % during 1H23



Source: AAA data, KBA, ANFAC, ANFIA, GANVAM, SMMT, Creditreform Rating

In 1H23, France was the only one of the top five European markets to register a decline. Nevertheless, a prolonged period of contraction came to an end, with transactions up 3.4% y-o-y in June 2023. Conversely, the used-car markets in Germany, Italy, and the UK exhibited notable growth of over 4.0% (see Figure 7) during the same period, partly attributed to the alleviation of disrup-

tions in the supply chain. Still, the used-car transactions displayed a muted performance, primarily attributed to the enticing incentives extended for the purchase of new cars and the postponement in the decision-making process of many individuals due to concerns stemming from inflation.

The interplay of factors such as backlogged newcar orders, limited availability of used cars after three years of scarcity, and robust labor markets fostering individual expenditures, have provided a protective buffer for transactions in pre-owned models. Prices have maintained their stability, although used cars are consistently changing hands at levels lower than the peaks seen in 2022.

Additionally, concerns surround the used-car market for BEVs, including increased depreciation over the lifecycle of the electric powertrain due to evolving technology, as well as a less vigorous demand in the used-car sector in contrast to vehicles with internal combustion engines. The realization of prices for used EV cars is also influenced by recent price reductions for new models, promotional offers, and lower leasing rates. The differences in performance between different powertrains in Germany mirror the trends observed in other European markets.

In 1H23, new car registrations saw a notable rise in **Germany**, driven by all drive types except PHEVs. However, the used-car market faces challenges. Industry consensus suggests a slowdown, evident in growing stock levels and longer average days to sell, leading to price pressures. EVs, including PHEVs and BEVs, make up nearly 15% of newer used-car stock, but weak demand in the German market is causing problems due to the widening gap between supply and demand.

Although more used vehicles were sold in 1H23 compared to 1H22, stock levels are rising faster

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than sales, particularly for EVs. Tactical registrations by dealers and manufacturers might alleviate this pressure, as these vehicles enter the used market 6 to 18 months after registration. In contrast, internal combustion engine models face less pressure and dominate the market, keeping prices stable. The lack of enticing government incentives for EVs remains a challenge, requiring improved appeal to drive demand for used electric models.

In **Spain**, the better tourist season led to a 70% y-o-y growth in the rental channel in 1H23, ending a year-long dearth. In contrast, the used-car market showed modest growth of 2.7% y-o-y in 1H23, with indicators such as average days to sell worsening. Meanwhile, newer models face a declining trend in average transaction prices, particularly within the younger age bracket. Residual values are projected to drop by 1.8% by the end of 2023, with milder declines anticipated in 2024 and 2025, reflecting current market dynamics.

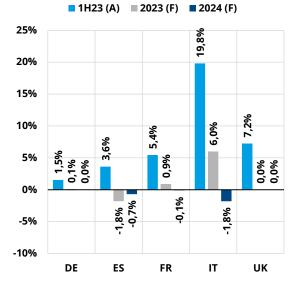
During 1H23, the **French** used-car market was stable. Absolute RVs increased (see Figure 8), potentially due to slightly elevated list prices. However, sales volume decreased as the time required to sell a used car increased. The recent elevated prices in the used-car market have led to deferred purchase decisions, a trend that has become increasingly evident on a monthly basis. This pattern is expected to lead to declining residual values in the upcoming months.

The **Italian** used-car market displayed remarkable stability in 1H23, with minimal fluctuations in RVs as a percentage of list prices. However, industry players have warned of impending shifts. Annual growth is predicted to moderate in 2H23. While some lingering issues from recent years, like extended new-car delivery times, are improving, the transformation is slower than initially anticipated. As a result, the RV forecast for

2023 has been adjusted slightly to an annual increase of 6.0%.

Figure 8: RVs expected to remain broadly stable

Incremental change in Residual Values – actual (A) and forecast (F)



Source: Autovista, Creditreform Rating

Despite significant financial pressures caused by the escalating cost of living, the demand for used cars in the **UK** remained strong. The retail sector witnessed strong activity in 1H23, leading to active wholesale channels as dealers aimed to replenish their stocks more frequently. Values for most models have remained steady, with the exception of BEVs, which have experienced a notable decline since 4Q22. Despite this decline, the average RV for BEVs remains higher than in January 2021, owing to the upward trend seen in 2021 and 2022 due to high demand and supply constraints. The UK's average BEV value is slightly lower than Spain's, yet outperforms France and Italy. Throughout 2023, BEV values are anticipated to continue to decrease at a similar pace to other fuel types.

Looking ahead, the introduction of attractive mass-market BEV models will lead to a series of launches in the remainder of this year and into

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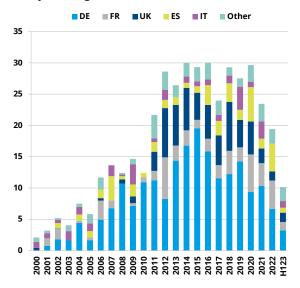
2024. This is expected to increase demand and bolster new vehicle sales. In addition, well-established brands from outside Europe are set to enter the region, raising new-car supply and lowering average list prices.

### 2. The Auto ABS Markets in **Europe**

The year 2022 started on a positive note, however, the geopolitical events and their negative repercussions on macroeconomic factors had a notable impact on the Auto ABS issuance market. Despite seeing some modest improvements in new car supply during the second quarter of 2022, the overall figures for the entire year marked the EU's worst performance in the newcar market. Consequently, auto ABS issuance in the 2H22 reached its lowest levels. On the whole, auto ABS issuance contracted by 17.2%, totaling 19.42bn euros in 2022 (see Figure 9).

Figure 9: Development of auto issuance activity in the EU

The volume of new auto ABS issuances in billion euros, by the origin of the collateral

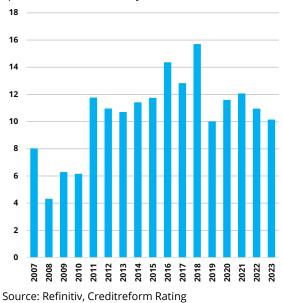


Source: Refinitiv, Creditreform Rating

The European auto ABS market displayed resilience during 1H23 in the face of struggles due to the sustained influence of the macroeconomic challenges and solidified inflationary pressure. Auto ABS issuances amounted to 10.15bn euros in 1H23, nevertheless corresponding to a 7.3% y-o-y contraction (see Figure 10). The issuance volume during 1H23 thus continued to decelerate and was the second lowest, only to the 1H19 level in over a decade. Regardless, auto ABS have traded well, benefiting from rising used vehicle prices because of inflation and a surge in demand.

Figure 10: Primary market issuance activity in 1H23 remained relatively resilient

The volume of new auto ABS issuances in the respective first half of the year, in billion euros



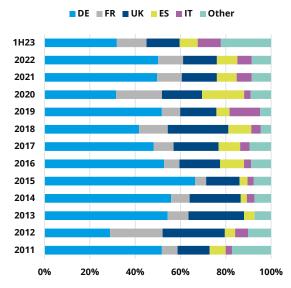
Geographically, close to one-third of the new issuances in 1H23 continued to originate in the largest auto ABS market, Germany, followed by other countries. Germany's market share (see Figure 11), although decreasing, has continued to dominate, with issuances worth 3.2bn euros during 1H23. Similarly, the UK, too, regained some momentum, moving close to a 15% market share, albeit absolute issuances amounted to just 1.5bn euros.

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Figure 11: Germany's share slide to pandemic levels

Share in auto ABS deals by the origin of collateral, measured by annual issue volume



Source: Refinitiv, Creditreform Rating

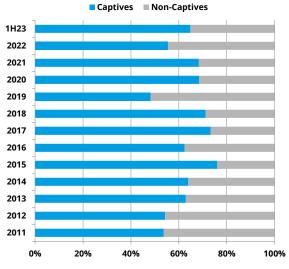
Portugal recorded three times the issuance volume of 2022 in the first half of 2023, pushing the share of peripheral European countries significantly higher to 22%, above the average of around 8% over the past five years, indicating a slightly different landscape in terms of issuance origin share. Whilst the new issuance in the UK market bounced back, the ABS issuance activity declined in Spain (8%). France (13%) also saw a drop in its share, too as compared to 1H22 but remained above the pre-pandemic levels

In terms of originators of auto ABS, the major European issuers were predominantly banks affiliated with automobile manufacturers, so-called captives. The market share of captives during 1H23 rose to 65%, converging towards the long-term average (65%). Of the total new issuance volumes in 1H23, around 6.5bn euros were issued by captives, corresponding to a 28% y-o-y increase when compared to 5.2bn euros issued in the first six months of 2022. Meanwhile, non-captives showed a declining trend, with issu-

ances of 3.7bn euros, down 32% y-o-y. The market share fell to 35% of the total volume issued by European originators but remained close to the average share of 34% seen during 2017-2021 (see Figure 12).

Figure 12: Captives take up the forefront in the first half of 2023

Originators share in volume of new auto ABS issues



Source: Refinitiv, Creditreform Rating

Turning to captives, Volkswagen, the leading German automaker, dominated as an auto ABS originator during 1H23, having issued 2.1bn euros, accounting for over 20% of the total market share (see Figure 13). This corresponds to a rise of nearly 21% compared to 1H22. The bellwether continued to lead the issuance pack as the supply chains stabilized and aided in rising global deliveries. The group is also pushing its presence in the electric space and the recent price cut in China is a testament to it and has helped Volkswagen to gain new orders. Hence, a relatively steady supply chain and boost in the EV space may provide some tailwinds for issuance volumes even in the upcoming months.

Meanwhile, BMW issued 1.6bn euros during 1H23, as compared to 1.7bn euros in 2022 as a whole. It points to the frontloading of the issu-



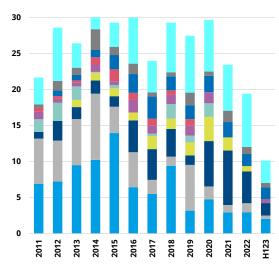
ance calendar with a share of 16% of total captive issuance during 1H23. In addition, Renault, Ford, and Toyota were amongst the captives remaining active during the first half of 2023, issuing 1.7bn, 567mn and 539mn euros, respectively. While Toyota issued for the first time since 2014 (on the European market), other auto majors like Daimler, General Motors, Volvo, and Hyundai were inactive in primary markets.

Figure 13: Volkswagen leads captives' pack

The volume of new auto ABS issues in billion euros

Volkswagen
Renault
Santander
Daimler





Source: Refinitiv, Creditreform Rating

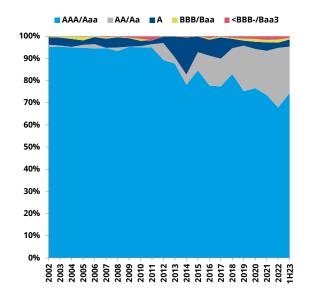
Following the merger of Peugeot and Fiat, we have classified both entities under the umbrella of the Stellantis holding company since 2021. Hence, we have not recorded any issuances at the subsidiary level. However, we have still treated Peugeot and Fiat separately in Figure 15 up to 2021 for illustrative purposes and classified Stellantis as a new originator under 'Other Captives'. Measured this way, Stellantis issued 85mn euros during 1H23.

Non-captive issuance activity came in weaker, as the share in total issuances fell to about 35%, with issuances declining by 32% y-o-y in 1H23. The issuances were largely led by BNP Paribas, offering an overall amount of 1.02bn euros, representing around 29% of the total non-captive issuances.

In terms of credit rating, total rated issuance reached 8.3bn euros. That said, the cumulative share of AAA/Aaa-rated issuance has been gradually declining in the past few years, especially seen from 2018, with the coveted AAA rating representing roughly 83% of all the issuances at that time (see Figure 14). However, this year's issuance in the first half looks promising, with the share now at 74%, partly reflecting strong issuance volumes of deals backed by auto finance from countries such as the Germany, France, and the UK.

Figure 14: AAA-rated issuances on the rise

Initial ratings (S&P, Moody's, Fitch) include senior and subordinate tranches, share in the yearly issuance volume, measured by the issue volume of all rated notes



Source: Refinitiv, Creditreform Rating

At the same time, a rising share of AAA-rated space has captured the share of AA-rated issuances, in contrast to the trend observed over the years. However, the share of AA-rated issuance

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remains notable at 21% in 1H23, below the share of 27% in 2022. Conversely, the proportion of the A-rated category rose, closing the 1H23 at 3.2% of all the rated issuers after 2.3% in 2022. The issuance volume at the lower end of the investment grade category (BBB/Baa) and below fell below 1%, a level last observed in 2018.

Since 1Q23, auto ABS spreads have widened and remained elevated until the end of 1H23. This appears to be related to an episode of financial market stress in March 2023, mainly in the banking sector, in connection with the resolution of two US banks and the struggling of a major Swiss bank that ended in a merger. That said, these developments were in line with the broader fixed-income market for corporate debt and have moderated since then. Meanwhile, delinquencies and defaults remained low in nominal terms, which supported the market, even as it registered an increase in the annual share.

The European ABS market somewhat recovered from the challenges it encountered last year. While some residual impacts remain, the automotive sector has displayed a proactive stance, and it is actively working on diversifying its supply chains and adopting a more self-reliant approach to enhance its resilient nature. These strategic shifts are anticipated to have a favorable impact on the ABS segment. However, the presence of macroeconomic uncertainties will still exert an influence. Moreover, the historically elevated interest rates will play a role in shaping the demand for auto ABS, potentially creating a division.

# 3. Perspectives for the issuance of European auto ABS

Following significant challenges in 2022, the global auto industry is adapting and gradually reconstructing its supply chain to support new

car registrations. However, persistent global geopolitical tensions, elevated inflation and ongoing monetary policy tightening pose challenges for the industry in 2H23. The Russia-Ukraine conflict, coupled with trade tensions between the U.S. and mainland China adds further strain, with China limiting semiconductor material exports from July. While the semiconductor shortage has improved, the underlying problem of inadequate mature node production capacity remains unresolved.

Furthermore, subdued economic activity owing to fears of a recession could curb spending. Besides, the green transition of the automotive industry could squeeze manufacturer profits due to higher investment requirements needed for infrastructure development. Nevertheless, sales in 2023 are expected to be relatively high due to the base effect, as sales in 2022 bottomed out during the slowdown in Europe.

The European automotive industry is also facing extensive competition from China. The influx of Chinese car imports has prompted some European businesses to seek assistance, as the affordability of Chinese electric cars' is aided by significant government support. The EU's subsidies on EVs have led to a surge in imports of Chinese-made EVs, partly due to the competitive pricing of Chinese EVs and the delayed introduction of competitive European EVs. European automakers are concerned that China's excess production capacity could result in cheaper EV exports to Europe, undercutting local manufacturers. Some European countries, such as France, are contemplating protective measures such as tariffs or incentives to safeguard their EV industries.

More generally, the EU confronts intense competition and significant dependence on China, which holds a dominant 77% of the global cell-manufacturing capacity for batteries. To mitigate risks amidst rising geopolitical tensions, the

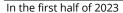


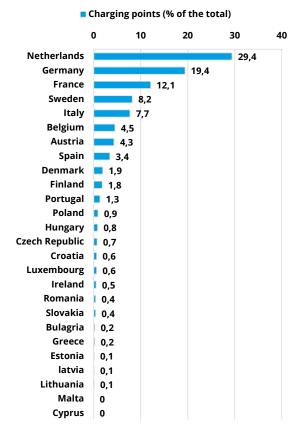
EU introduced a regulation in July 2023 targeting waste battery collection. The aim is to achieve 63% and 73% collection rates by 2027 and 2030, respectively, including specific objectives for light transport batteries. The legislation also sets ambitious goals for recovering lithium from waste batteries (50% by 2027, 80% by 2031), contingent on market dynamics and lithium availability. It establishes minimum recycled content levels for various battery types and recycling efficiency targets.

Moreover, the threat extends beyond China to the US due to the implementation of the Inflation Reduction Act (IRA). This move could have a significant impact on the automotive industry as the IRA's 7,500 US dollar consumer tax credit on electric cars could reduce the cost of an average eligible vehicle by about one-fifth. Also, it could affect the ability of foreign car manufacturers to maintain their existing market shares in the US. Consequently, the EU faces the risk of substantial export losses to the US. Concerns also arise about the possibility of EU companies relocating to the US.

Another impending challenge could be that the demand for EVs outstrips the public charging infrastructure. Currently, as per ACEA, most of the total charging points for electric cars across the EU region are concentrated in only three countries - the Netherlands, Germany and France which cover less than 23% of the EU in terms of surface area. The remaining share of charging point is spread over the remaining 24 EU members (see Figure 15). While the number of charging points has increased significantly in recent years, it is still insufficient to meet the growing demand for EVs. Additionally, given that BEVs demand more energy for charging, the increasing popularity of BEVs would require the expansion of faster charging infrastructure.

Figure 15: EV charging infrastructure in the EU remains concentrated in a few economies





Source: EAFO, Creditreform Rating

The EU has committed to achieving net-zero emissions by 2050. To work towards this goal, in April 2023, the EU enacted a law to prohibit the sale of new cars emitting CO2 by 2035, with Germany being the only exception for vehicles that run on e-fuels. Notably, companies such as Porsche and Ferrari endorse e-fuels to avoid the added weight of heavy batteries in their cars. On the other hand, automakers such as Volkswagen, Mercedes-Benz, and Ford are placing their bets on BEVs to reduce carbon emissions.

In 2022, as per European Environment Agency provisional data, the average CO2 emissions of new passenger cars registered in Europe were 108.2 g CO2/km, declining by 6 g CO2/km from 2021 and 27% lower than in 2019. This is a posi-



tive sign, but more needs to be done to accelerate the transition to zero-emission vehicles. Also, as the sector transitions to BEVs, commodity hedging for key battery components, including Lithium and Nickel, will become more important.

The European auto securitization space is constantly evolving, nowadays with an increasing focus on sustainability issues, as carmakers are required to act in an environmentally responsible way and promote a carbon-neutral and efficient use of resources. Meanwhile, automakers are proactively addressing tightening sustainability regulations. One such recent proposition by the European Commission focuses on the circularity of the automotive sector by improving design and end-of-life management of cars aiming to improve resource efficiency, reduce CO2 emissions by 12.3mn tons by 2035, and promote sustainable business models. These regulations also seek to prevent the export of unsafe vehicles and reduce pollution and health risks in countries importing used EU vehicles.

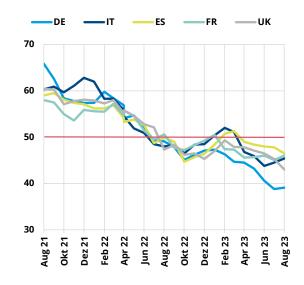
Additionally, the economic backdrop remains a headwind, creating a challenging environment in which to operate. In parallel with the global slowdown, business confidence in the euro area continued to decline in the first half of the year. Manufacturing conditions have been deteriorating, and the Purchasing Manager's Index (PMI) has been tumbling since January 2022 (see Figure 16) while remaining in contractionary territory, i.e. below the 50-point mark, for over a year. The PMI figure for August stood at 43.5, marking a slight rise from July's 38-month low, while Germany posted the second lowest reading to 39.1, followed by UK to 43.0.

However, the convergence of lower input demand and improved supply conditions led to a notable decline in average input costs. In line with this, the price of goods leaving factory gates experienced a sharp decline, the lowest in close

to two decades. Notably, supply conditions remained favorable for buyers, as evidenced by another robust improvement in delivery times. Given these complex dynamics, it remains premature to assert that the manufacturing sector has reached its turning point.

Figure 16: Manufacturing PMI contracting across the bloc

<50= contraction, >50=expansion



Source: Refinitiv, Creditreform Rating

This weakening trend is in sync with the significant slowdown in factory output, reduced production volumes, and decline in new export business. New orders and purchasing activity continue to decline despite falling prices, further creating a dent in the manufacturing output. Consequently, the rate of job creation in the manufacturing sector declined for the first time since January 2021.

The challenges remain for the sector even one and a half years after Russia's military aggression against Ukraine rattled trade flows and caused prices for a number of commodities, in particular energy, to soar. Disruption of the flow of natural gas from Russia to Europe created instability in manufacturing dynamics within the region over the past year. However, spikes in



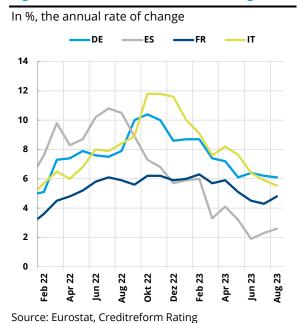
natural gas prices and shortages across the EU have prompted European countries, and in particular Germany as a large importer of Russian energy, to take action to diversify their gas supply away from Russian sources. More recently, Germany's government debates plans to invest in energy tax subsidies for its industry and further step up the infrastructure for liquefied gas.

Support measures, combined with a milder-winter in the 1H23, contributed to price moderation, and energy inflation declined by 3.3% y-o-y in August 2023. Auto production was under the looming threat of energy rationing in an otherwise energy-intensive sector, which posed a formidable challenge. Nevertheless, the situation now appears to be in a recovery phase.

In addition, the recent joint venture between Taiwan Semiconductor Manufacturing Company (TSMC), the world's largest chipmaker, and German companies Bosch, Infineon and NXP, which will take advantage of huge government support for a reported 11bn US-dollar investment in a chip plant in Germany, is expected to ease concerns about semiconductor supply shortages that have contributed to the price hike. It will be the company's third plant outside its traditional manufacturing bases in Taiwan and China. This plant will be central to the German government's ambition to foster the domestic semiconductor industry for its auto industry to remain globally competitive.

Despite persisting geopolitical challenges, as well as headwinds to the economic recovery in the euro area from ongoing monetary policy tightening and high consumer prices there have also been positive tendencies. Global supply chain disruptions have now largely abated, and annual inflation has come off to 5.3% in August from double-digit highs seen last year (see Figure 17), primarily driven by energy prices, which continued to decline. Labor markets have remained relatively resilient.

Figure 17: HICP inflation on a declining trend



That said, core inflation, which excludes energy and food, remained rather sticky, reaching 5.3% in August 2023, and pointing to inflationary pressure still being present in the economy. Simultaneously, economic growth resumed in 2Q23, posting an increase of 0.6% q-o-q, according to preliminary Eurostat data. While the growth is supported by receding price pressures, a strong labor market, and fiscal support, it remained limited to certain countries of the bloc. While second-round effects on price levels against the backdrop of strong wages remain a concern for the European Central Bank (ECB), consumers seem to be increasingly expecting inflation rates to fall, as underscored by the European Commission's respective monthly survey.

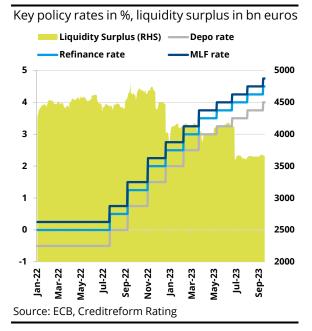
The ECB is faced with the dilemma of not causing a severe recession while having to bring inflation closer to the 2% target amidst the challenges surrounding it. In its latest macroeconomic projections, dating from September 2023, the ECB forecasted the inflation rate to average 3.2% in 2024 and 2.1% in 2025. Projections for the core rate also largely corresponded to these levels for



the coming two years. At the same time, the ECB lowered its GDP growth forecast markedly.

While the ECB was late to jump on the tightening monetary policy bandwagon, the rate hikes have remained frontloaded and determined to weave off inflation. The central bank has raised its key policy rates continuously since July 2022, and in its latest September meeting, the ECB Governing Council decided on another rate hike by 25 basis points, lifting the marginal lending facility, main refinancing rate, and the deposit rate to 4.75%, 4.50% and 4.00%, respectively (see Figure 18).

Figure 18: ECB continues to hike as surplus liquidity takes a setback



Looking ahead, while the ECB remains vague on this, we consider it likely that the ECB's monetary policy rates have reached their peak, but we do not assume rate cuts to start until the second half of 2024. At this point, we are working with the assumption that the ECB's main refinancing rate will be at 4.5% by the conclusion of 2023 and at 4.0% by the close of 2024. It is important to acknowledge that due to the unpredictable developments surrounding the conflict in Ukraine, uncertainty remains at a heightened level.

Meanwhile, the gradual reduction of the ECB's Asset Purchase Program portfolio continues, as reinvesting principal payments from maturing securities have ceased from July 2023. On a related note, the ECB has reaffirmed its commitment to reinvest maturing securities as part of the Pandemic Emergency Purchase Program (PEPP) until at least the end of 2024. The cumulative effects of the ongoing monetary policy tightening and squeezed out liquidity should increasingly weigh on domestic consumption that can in effect impact the Auto loan originations and in turn, ABS issuance.

Although fiscal support is gradually being phased out, it will continue to cushion the impact on consumption and investment while simultaneously supporting the green transformation. Furthermore, destocking efforts and falling input orders due to lower demand point to subdued optimism in the manufacturing industry, whereas sentiment within the service sector has been more resilient.

Meanwhile, economic activity in the UK weakened, but it did not mark a technical recession, and in the three months to June 2023, the UK GDP posted a moderate expansion by 0.2% q-o-q. Consumption contributed positively to the UK's output growth, and manufacturing remained a main driver thereof in the second quarter. Domestic demand remains challenged by high inflation and subsequent high-interest rates, as well as by an increase in the corporate tax rate. The expiry of investment incentives is also likely to weigh on business investments in the near term. A significant push to the economy from the external sector seems unlikely, given the dampening effects of tight monetary policy elsewhere also.

Moreover, indicating a lackluster development for the time being, the UK manufacturing PMI has continued to decline to 43 points in August 2023, driven by contracting output which has



been steepest in the survey's history, lower new business, reduced export demand, and weakening employment levels. Regarding prices, input costs declined significantly, approaching the lowest level since January 2016. In contrast, selling prices were marginally down.

While the labor market remains overall tight, there are signs of a more negative impact of the slow economic pace: The unemployment rate rose to 4.2% in the three months to June 2023, and permanent hires saw a decline. That said, ongoing strike action in parts of the public sector could result in further pay rises, adding inflation pressure. The UK's headline inflation came down to 6.8% in July 2023 after hitting double digits at the beginning of the year, which corresponds to the highest readings in four decades. However, core inflation increased significantly and reached 6.9% in July 2023.

In a bid to revert inflation, after a hike by 50 basis points, the Bank of England (BoE) at the August policy meeting delivered a fourteenth consecutive rate hike, on this occasion by 25 basis points, bringing the bank rate to 5.25%. With ongoing upward pressure on underlying wage growth and sticky core inflation, further rate hikes by the BoE are likely. Our expectation is for the BoE's key policy rate to stand at 5.75% at the end of the year.

At the same time, the reduction in the size of the Asset Purchase Facility (APF), which commenced in March 2022, continues. During its September 2023 gathering, the Monetary Policy Committee (MPC) will conduct its yearly assessment and cast its votes on the objective of reducing gilt stock over the upcoming 12 months spanning from October 2023 to September 2024.

The economic outlook for Europe remains in part under the impression of elevated uncertainty related to the unpredictable events around the war in Ukraine. On the other hand.

the European economies have made good progress in adapting to these challenges, and supply-side challenges that started last year and trickled down in the first half of 2023 seem to be alleviating. However, as is the case in Germany, which looks set to underperform euro area GDP growth this year and next, higher exposure to manufacturing, a less advantageous starting point in terms of its energy mix and respective import dependencies, in combination with a lagging shift to electric mobility presents significant headwinds at this stage.

Despite the hurdles expected in the latter half of this year, there is thus an anticipation of an upward trajectory in car sales, encompassing both the new and used-car sectors. Consequently, new Auto ABS issuance in the primary market is expected to remain stable throughout the latter part of 2023. This is supported by the robust pricing trends in both the new and used-car markets, coupled with some resilience in demand. These factors are all influenced by the positive state of labor market conditions, as well as the persistently strong investor interest driven by low default rates and high residual values.

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