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

Semi-Annual Report 2022

Financial Research September 2022



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Management Summary

1.

The European car market's depressed performance in the second half of 2021, driven by severe global semiconductor shortages, spilled over into 2022. However, this time around several new factors posed headwinds further intensifying supply-side constraints, apart from reintroduced pandemic containment measures. Geopolitical tensions and adverse climate conditions were among the key sources that further pressured global auto market performance. New passenger car registrations across major economies endured negative performance despite strong demand. Sales in Europe (EU-27+UK) plummeted by nearly 14% y-o-y, to 5.4mn units, with double-digit declines seen in the top five markets. The US automobile market followed suit as sales contracted sharply by 25.7% y-o-y to 2.8mn units. China's passenger car sales increased 3.4% y-o-y to 1.2mn units; however, the positive performance was due to remarkable 40% y-o-y growth in June alone.

2.

Despite several challenges, efforts of the automakers to transition towards a greener environment were evidenced by a notable rise in the electric vehicle (EV) segment. During the first half of 2022, the EV market share expanded rapidly by 8 p.p., inching towards 37%, primarily driven by Battery Electric Vehicles (BEV). BEV registrations posted a 33% y-o-y growth in sales, marking a notable expansion of market share by 3 p.p. to 9%. By contrast, traditional fuel types including petrol and diesel-based powertrains suffered steep losses in market share.

3.

Production volumes of passenger cars were dampened due to severely damaged supply lines of some of the critical primary and intermediate components, resurging raw material prices, general uncertainty stemming from the Russia-Ukraine war, and a severe outbreak of coronavirus in China. UK posted the weakest first half, with production down nearly one-fifth and even worse compared to the financial crisis of 2009. Meanwhile, Germany's production volumes slipped by a more moderate 3% y-o-y, but were 33% lower compared to pre-pandemic levels.

4.

The used car market witnessed supply shortages being persistently outstripped by solid demand. The German market proved particularly

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weak in terms of transactions, with the latter contracting 14.6% y-o-y in 1H22, followed by France and UK. Spain was the most resilient in this regard, as the country managed to cater to the demand through imports. Constrained supply combined with surging energy costs and elevated consumer price inflation played a key role in the development of residual values (RVs). Germany, France, and Spain saw RVs extending modest gains driven by significant upside pressure on list prices. The UK's market was an outlier facing mounting pressures on RVs as volatility increased sharply. Assuming a gradual easing of supply chain pressures throughout next year, overall average gains in RVs are expected to moderate in the second half of 2022 and thereafter stabilize in 2023.

5.

Primary auto ABS issuance volumes aggregated to 10.4bn euros in 1H22, contracting nearly 6.0% compared to the corresponding period of 2021. The issuance volume observed during the period was the second quietest only to the 1H19 level in over a decade. More than one-third of the new issuances originated from Germany, compared to just over one-fourth and around one-fifth from Spain and France, respectively. Whilst there was no ABS issuance activity on the Italian market, the UK's primary issuance share plummeted to just 3.5%, substantially below the average market share of around 18% observed over the past five years.

6.

Captives' market share of new issuance volumes slipped below their long-term historical average of 66%, and, more particularly, fell to just slightly below 50%, thus levels last recorded in 2019. Volkswagen, Renault, BMW, Daimler, and Stellantis were amongst the most active issuers, with the top three accounting for 84% of the issuances. On the other hand, non-captives' market share exceeding 50% was led by BBVA offering the overall highest issuances worth 2.2bn euros alone in during 1H22.

7.

Volumes of coveted AAA-rated issuances dropped to below two-thirds of the total issuances in 1H22. The declining share of triple-A space has been captured by the higher prevalence of AA-rated issuances, which rose from 8% in 2015 to a notable 30% in the first six months of 2022. Conversely, the proportion of the 'A' category continued to shrink to only 2.1% from 4% in 2021.

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8.

Looking ahead, the most pressing challenges on the supply side are showing some signs of easing. That said, some of the pent-up demand could potentially flow through into 2022 supporting new car registrations. However, an uncertain macroeconomic backdrop characterized by elevated inflation, rising interest rates, and weakening economic growth prospects combined could see households increasingly struggling with their finances as real disposable incomes begin to fall. Higher borrowing costs could force consumers to reconsider or delay big-ticket purchases such as automobiles and houses and rather conserve cash. However, labor markets remain tight, and the accumulation of savings during the pandemic still provides for some buffers in the face of rising inflation. Hence, passenger car sales both in new and used car markets can be expected to play some catch-up even in the second half of this year. Accordingly, issuances in the auto ABS primary market should remain supported even in the second half of 2022 underpinned by a strong appetite from investors on the back of low default rates and elevated residual values.

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1. The European Car Market at a Glance

The post-pandemic recovery of the global automobile industry has been once again interrupted entering into 2022. Adverse developments including geopolitical tensions across Europe due to Russia's invasion of Ukraine, Covid-19-induced lockdowns in China, and heatwaves across several parts of the world were among the key reasons that further complicated supply chains, leading to an extremely difficult first half of the year for the auto industry. Even though consumption remained robust, the tight inventory situation continued to be the biggest factor limiting sales.

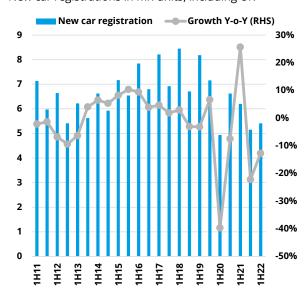
In Europe, the dismal performance of new car registrations during 1H21 spilled over into 2022. Russia's invasion of Ukraine in February 2022 disrupted supply lines of numerous critical components amidst the ongoing global semiconductor crisis. Adding to the woes, restricted gas supplies due to sanctions on Russia pressured factory operating costs and resulted in the disruption of various production sites. Consequently, the European market (EU-27 plus UK, to make the historical comparison consistent) witnessed a precipitous drop in passenger car sales of 14% y-o-y during the first half of 2022 (see Figure 1), compared to 26% growth in the corresponding period for 2021, with approximately 5.4mn units, reported by the European Automobile Manufacturers Association (ACEA).

Following suit, the US automobile market too remained stuck in low gear as sales recorded a sharp decline of 25.7% y-o-y at 2.8mn units during 1H22, given the thin supply of new cars. For the same period, China's passenger car sales increased 3.4% y-o-y to 1.2mn units, as per the China Association of Automobile Manufacturers

(CAAM). However, China's positive performance is attributed to significant growth of more than 40% y-o-y reported in June 2022 alone. Going forward, China's market stands a higher chance of recovery in the second half of the year, prospectively receiving a boost from incentive policies of the government, such as the reduction of vehicle purchase tax expected to last until the end of 2022. Elsewhere, India's passenger vehicle sales remained upbeat. New car registrations at 1.8mn units, rose 12.5% y-o-y as government measures to reduce inflation by cutting back on central excise duties on petrol and diesel boosted market sentiments.

Figure 1: European new car registrations downtrend spills into 2022

New car registrations in mn units, including UK



Source: ACEA, Creditreform Rating

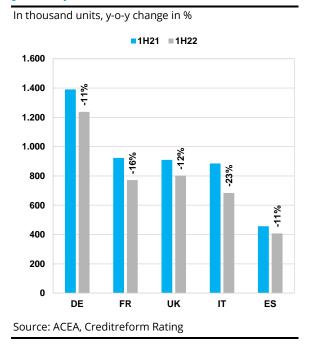
During the first half of this year, the downturn in Europe's car market was notably more pronounced, led by broader double-digit declines across all its key markets. Mainly dragged by the second quarter of the year, Germany, the largest market in terms of volume, contracted 11% y-o-y, with 1.24mn units sold in 1H22 (see Figure 2). The German automobile sector showed no

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signs of recovery and seemed far from normalizing to the pre-Covid-19 levels. Furthermore, the second half of the year also appeared to have commenced on a weak note.

Figure 2: Double-digit declines across all major European economies

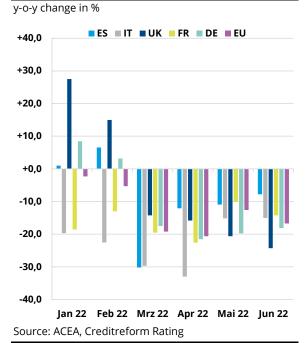


Nevertheless, Battery Electric Vehicles (BEVs) showed a marked increase, with demand continuing to outstrip the supply. Considering the same, the German government is mulling over cutting back incentives dropping subsidies for Plug-in Hybrid Electric Vehicles (PHEVs) from January 2023 onwards. Moreover, the incentives for BEVs costing below the 40,000 euros threshold will be slashed to 4,500 euros next year from 6,000 euros, and cars priced above 40,000 euros will be subsidized by 3,000 euros from the current 5,000 euros. Also, the incentives are set to further narrow down into 2024. Moreover, the benefit will not be extended to company cars and would be limited only to private customers from September 2023.

In a similar vein, the UK sustained losses into 1H22, as the new car registrations contracted 12% y-o-y, registering a sales volume of 802,000

units (see Figure 3). Furthermore, sales dropped by 9% y-o-y in July, marking the fifth month of consecutive decline. Assessing the current conditions, the Society of Motor Manufacturers and Traders (SMMT) believes it to be the most challenging year for the industry in three decades. Accordingly, even though the second half of the year is set to improve in terms of easing supply issues, the market is unlikely to recover losses incurred so far, leading SMMT to revise the full-year outlook downwards to 1.6mn new car registrations. Compared to 2021, this corresponds to a decline of 2.8%, while the 2023 outlook is expected to reach 1.89mn.

Figure 3: Supply issues continue to limit sales



On a brighter note, uptake of BEVs grew significantly, by 50% between January to July 2022, attaining a market share of 13.9%. The growth in the BEV market was partly driven by anticipatory effects, as the government pulling its plug on the EV rebate incentive in June following the successive reduction in grants. The government further shifted its funding towards addressing the main barriers to EV transition such as charging infrastructure. Therefore, the increase in sales was

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likely also supported by pent-up demand, and as manufacturers accelerated their efforts toward supporting the transition to zero-emission mobility.

Italy turned out as the worst performer amongst key markets in terms of both volume and growth, with a sale of 684,000 units, suffering a sharp decline (-23%). The loss of momentum for Italy came in due to weak expansion of the electric vehicle market, as the government struggled to relaunch an overdue fiscal package to support low-emission vehicles. This was evident from the pure electric vehicle sales that plunged 17.5% y-o-y to 25,082 units through 1H22, resulting in a decreasing market share from 5% to 4% (see Figure 4).

Figure 4: Rising share of BEVs and HEVs

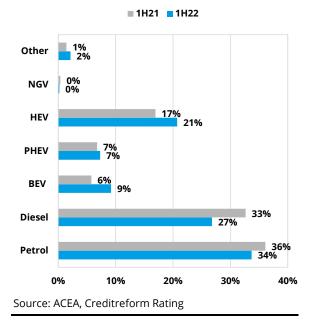
Percentage share in total new registrations ■ Petrol ■ Diesel ■ HEV ■ PHEV ■ BEV ■ Others 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2021 1H22 2021 1H22 2021 1H22 2021 1H22 2021 1H22 DE UK FR IT ES Source: ACEA, Creditreform Rating

The Italian EV market stabilized in June after the government announced its new reduced incentive package in April, which earmarked 650mn euros for the next three years from 2022 to 2024, availed from the government's automotive fund, which holds an aggregate budget of 8.7bn euros until 2030.

In France, too, electric vehicles remained a bright spot backed by the extension of an ecological grant from the French government of 6,000 euros to purchase electric cars until the end of 2022 instead of 01 July. On the other hand, the government also tightened rules to prevent the early resale of new EVs purchased under the state incentive schemes making tidy profits. The scheme now mandates owners to keep their new EV for a minimum period of twelve months instead of six and drive at least 6,000km. In case the conditions have not been met, the incentives provided are to be repaid to the government.

Figure 5: Diesel posted the steepest fall

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



Looking at the EU's progress with the current share by 8 p.p. to 37%, primarily driven by PHEVs

fuel mix, the market for conventional fuel types has continued to witness a freefall during the first half of the year (see Figure 5). Sales of petrol-based powertrain plunged 22% y-o-y, while diesel posted the steepest fall, declining by 31% y-o-y. Consequently, the market share of petrol cars dropped by 2 p.p. to 34%, whereas diesel share contracted by 6 p.p. to 27%. Conversely, the rapid acceleration in uptake of electric vehicles led to an expansion of the respective market

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and BEVs. The BEVs' registrations gained significant momentum posting growth of 33% y-o-y and a rise in market share by 3pp to 9%.

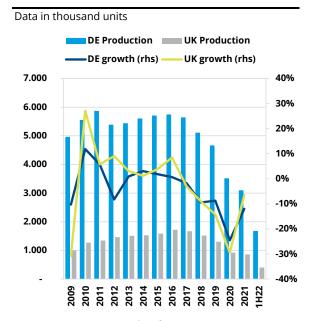
During the first six months of the year, the double-digit declines in new car registrations were largely impacted by limited production volumes as manufacturers battled persistent supply-side bottlenecks. Lack of availability of primary and intermediate components, rising raw material prices, and general uncertainty due to the ongoing Russia-Ukraine war have been the key factors compounding the automobile production woes. The situation worsened further in recent months with China's severe outbreak of coronavirus when compared to the last two years.

In the turbulent first half of the year, Germany's production volumes remained largely resilient contracting 'only' by about 3% y-o-y (see Figure 6). This said, it recorded a 33% fall in output compared to 2019, hence before the pandemic struck. Meanwhile, passenger car output in the UK was down by one fifth, posting the weakest first half since the pandemic and even worse than during the 2009 global financial crisis. Nevertheless, some recovery was observed during May and June. More notably, the BEV production proved to be a bright spot, with a record 6.5% growth benefitting from the GBP 3.4bn investment committed towards UK's zero emissions future during the period. Accordingly, the latest independent outlook report published by SMMT has downgraded the UK's production growth outlook to 1.2% for the full year 2022.

Undoubtedly, the automobile industry is confronted with several additional challenges this year, given resurgent inflation boosted by drastic increases in energy costs and shortages of crucial components. The industry is persistently striving hard to build indigenous microchips and become more self-reliant. However, efforts in this direction will take time to bear fruit, and

hence prospects of a significant easing of semiconductors supply remain unlikely in the near term.

Figure 6: Supply bottlenecks dampen production volumes



Source: VDA, SMMT, Creditreform Rating

Meanwhile, another pressing challenge emerging is the supply of batteries for electric vehicles. The prices of key raw materials used in batteries such as lithium, nickel, and cobalt have skyrocketed in recent months, further adding to increased cost pressures. Another setback for the European region is its heavy dependence on China, which is also the world's leading battery provider. It may be noted that China houses close to 80% of the world's current cell-manufacturing capacity. Evidently, Europe's carmakers seem most exposed amidst the rising geopolitical worries and rapid acceleration of electric vehicles.

To address this issue, leading automakers of Germany such as Volkswagen have planned to construct six gigafactories of their own by 2030 or, as is the case with BMW, team up with South Korean firms. It is also noteworthy that a number of start-ups are aiming at building capacities



in this area. In a rush to secure raw materials of batteries, Volkswagen and Mercedes Benz have also signed agreements with the Canadian government to deepen cooperation and strengthen the entire automotive value chain.

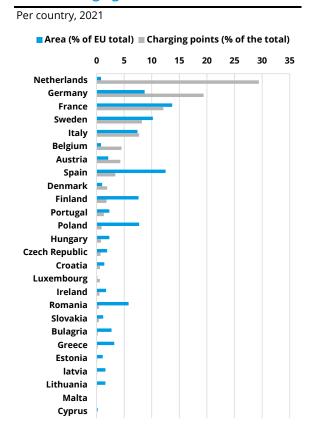
Despite intensifying raw material pressures, the Original Equipment Manufacturers (OEMs) are simultaneously coping with diligent efforts toward achieving the targeted carbon emissions. In a recent development, the European Commission's "Fit for 55" climate package (2021), which mandates the reduction of carbon emissions by 15% in 2025, 55% in 2030, and 100% in 2035, has been endorsed by the European Parliament and EU member states in June 2022.

To date, the European carmakers have reduced total carbon emissions from production by 46% since 2006, evidently reflecting the efforts of the industry as manufacturers have been increasingly sourcing energy from renewable sources or low carbon channels. Clearly, regulatory actions have resulted in an increased market share of electric vehicles, representing almost one in every five cars sold in the region. However, further advancing the reduction in carbon emission cannot be done in isolation by the automotive industry. To fully contribute to carbon neutrality and bring about a radical shift towards electro mobility, other factors need to be in play, including stepping up on investments by the government to deploy EU-wide charging infrastructure and secure availability of key raw materials.

In the EU, almost half of the total charging points for electric cars across the EU region are concentrated in only two countries – Netherlands and Germany – which combined cover less than 10% of the EU in terms of surface area, while the remaining half is spread across the remaining 25 countries, as per ACEA data (see Figure 7). Although there has been a strong increase in the number of charging points over the last five

years (up by 180%), there remain massive short-falls and wide distribution gaps across the region.

Figure 7: Stark differences in Europe's electric vehicle charging infrastructure



Source: ACEA, Creditreform Rating

Moreover, according to recent analysis spear-headed by ACEA, a dense network of charging points of nearly 6.8mn would be required by 2030 to attain the target of a 55% CO2 reduction by 2030 for cars, which essentially means 22 times growth in less than ten years. That said, the European Commission proposed an Alternative Fuel Infrastructure Regulation (AFIR) last year, which is now due for voting in September 2022.

Whilst the regulatory push towards cutting carbon emissions remains in full force, the rapidly changing climatic conditions have already started to unfold, posing greater operational

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risks to businesses. The recent heatwave across parts of Europe has partly hampered transport ways and thus production, as e.g. seen in Germany. This occurred amidst the dwindling supply of natural gas from Russia to Europe. The European government's plea to lower the use of gas and create reserves for winter months has caused automakers to reduce and replace gas with alternative fuel implying delivery disruptions.

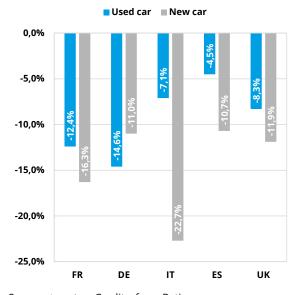
Moreover, the green transformation of the overall auto industry could burden electricity grids, likely adding to energy cost pressures. Also, the transition necessitates quick bureaucratic approval for switching. As a result, signs of the cutback in production are already being witnessed in the metal industry as some of the leading German aluminum and zinc smelters are considering curtailing nearly 50% of their production capacities, which could dent regional supply.

In light of the aforementioned disruptions, both new and used car markets in Europe have contracted dramatically. Presently, in light of resurgent inflation in conjunction with struggles to source crucial components, OEMs have strategically shifted their focus towards building highermargin models, electric vehicles, and catering to private consumers to ensure profitability and better align with carbon emission targets. Thus, leasing companies and other mobility providers face challenges in sourcing new cars and are forced to extend contracts and intensify collaboration with car rental companies. Together, these factors have continued to push up list prices of cars, further translating into higher residual values (RVs). As a consequence, customers are also seen shifting towards older used cars due to budget constraints. However, fastdepleting used car stocks are resulting in strong price gains in used cars as well, albeit less so for the UK.

Whilst Germany's new car registrations plummeted by 11%, it fared relatively better amongst key European peers (see Figure 8). By contrast, Germany's used car market displayed the weakest performance, with a 14.6% y-o-y contraction seen during 1H22. Considerably lower supply volumes in the new car market during the peak pandemic period in 2020 translated into undersupply of used cars. This resulted in a stark reduction in used car transaction volumes despite strong demand from consumers. In this environment, Spain's used car market proved comparatively resilient, contracting by a relatively moderate 4.5%, as the country managed to cater to demand through imports during the first half of the year.

Figure 8: Supply constraints lead to deteriorating performance in car markets

Used car transactions and New car registrations, y-o-y change in % during 1H22



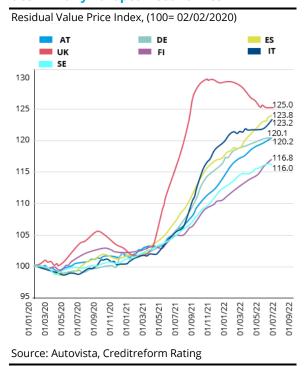
Source: Autovista, Creditreform Rating

From a price realization perspective, supply constraints in both used and new car markets combined with elevated inflation and surging energy costs have played a key role in the development of residual values (RVs). Germany, France, and Spain saw residual values extending gains throughout the first seven months of the year,



as opposed to the UK (see Figure 9). Significant upside pressure on list prices has been the key driving factor associated with feeding into RVs across these countries.

Figure 9: Mounting pressure on residual values in many European economies



Germany continues to struggle with new car registrations, mainly tactical and fleet registrations most relevant for the used car market. Subsequently, the market for young used cars is expected to remain undersupplied in the second half of this year. However, a rise in number of days to sell could result in impending price stagnation, which together with an increasing burden on purchasing power of consumers should limit the upside potential in RVs for the remainder year.

Having gained significant momentum during 2021, Spain's used car prices were also expected to stabilize through the first half of 2022. However, the war in Ukraine further worsened the situation. Stock levels began drying up and almost halved, mainly cushioned by imports. As a result, RVs were supported across almost all the

powertrains including the BEV and PHEV owing to solid demand as fuel prices surged. However, prices began to steady in June and July, against the backdrop of a plateauing number of days to sell cars. Furthermore, demand is more likely to recede owing to soaring inflation in the coming months, thus presumably lowering RVs.

France's used car market proved reasonably dynamic, too, as reflected in the RV development. That said, the increase in residual values was less pronounced compared to last year. Depleting stock levels and lower adverts compared to 2020 hinted at a relative fast pace of selling of used cars. Notably, older petrol car RVs remained supported, being a popular choice amongst consumers as the new petrol cars are subject to a penalizing tax, while petrol cars with the 'Crit'air 1' badge are allowed to enter cities without restrictions for now. Likewise, RVs of diesel cars gained as new supply continued to fade for environmental reasons. Despite falling demand, diesel cars still represent 50% of the used car transactions. However, stock days of diesel cars have increased, suggesting RVs may have reached their peak. Overall, average car residual values in France are expected to rise over the next few months before beginning to stabilize.

In Italy, RVs began slowing as consumers remained speculative about the pending renewal of the incentive package that was revived in June. Nevertheless, overall used car markets maintained strong price levels and healthy sales volumes. That said, auto vista forecasts 9.4% growth in average RVs in 2022.

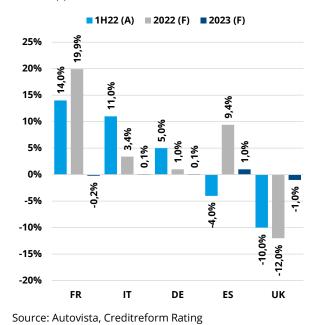
Meanwhile, the UK's used car market was an outlier facing mounting pressure on residual values during the first half of 2022 due to increased volatility. More aligned supply and demand dynamics contributed to the downturn in RVs as the UK continued to suffer from weak activity. Prices of used cars were seen falling faster than those of



new cars, which also resulted in falling retention value in percentage terms in June.

Figure 10: RV gains expected to weaken

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



Looking ahead, pre-existing supply challenges in the automotive industry are expected to persist at least through 2024. However, the general rise in inflation is contributing to cooling demand prospects for both new and old cars. As a result, the gains in residual values are expected to moderate in the second half of 2022 and thereafter at best stabilize in 2023 (see Figure 10).

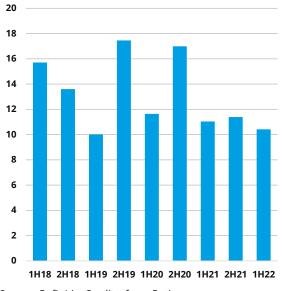
2. The Auto ABS Markets in Europe

The European auto ABS market remained resilient during the first half of the year amidst a challenging macroeconomic landscape, persistent inflationary pressure, and a resulting historical sell-off in debt capital markets as the broader market shifted away from traditional consumer assets. Auto ABS issuances amounted to 10.4bn euros in 1H22 (see Figure 11), corresponding to

a 6% y-o-y contraction compared to an aggregated 11.0bn euros in 1H21.

Figure 11: Primary market issuance activity in 1H22 remained relatively quiet

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



Source: Refinitiv, Creditreform Rating

The issuance volume observed during the period was the second-lowest only to the 1H19 level in over a decade. Nevertheless, auto ABS have traded well, benefitting from a notable rise in used vehicle prices because of supply outages and robust consumer appetite.

Geographically speaking, more than one-third of the new issuances during 1H22 were originated in the largest auto ABS market, Germany, whilst just over one-fourth and around one-fifth originated from Spain and France, respectively. Whilst there was no ABS issuance activity on the Italian market, the UK's primary issuance share plummeted to just 3.5%, substantially below the average market share of around 18% observed over the past five years (see Figure 12).

Interestingly, barring the UK, delinquencies in auto ABS were seen largely at the lower end across major EU markets. In light of the above, Germany's market share, although decreasing, has continued to dominate, with issuances

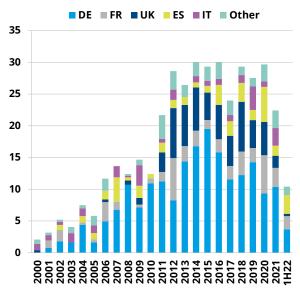
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worth 3.7bn euros during 1H22. This is followed by Spain, with issuance of 2.9bn euros, achieving its highest share in a decade. Similarly, France, too, regained some of its lost ground, moving close to a 20% market share, albeit absolute issuances amounted to just 2.1bn euros.

Figure 12: Development of auto issuance activity in the EU

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



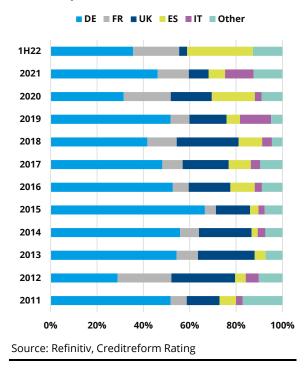
Source: Refinitiv, Creditreform Rating

Together, the three economies represented nearly 84% of volumes issued during the period (see Figure 13). Meanwhile, the primary deals in UK have been more vulnerable to inflation to an extent: There was a pronounced increase in arrears, as some of the transactions were backed by loans to weak borrowers sensitive to rising inflationary pressures.

In terms of originators of auto ABS, the major European issuers have predominantly been banks affiliated with automobile manufacturers, so-called captives. However, the market share of captives during the first half of this year fell to just slightly below 50%, hence 2019 levels and well below their long-term average (66%).

Figure 13: Spain achieves its highest share in over a decade

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

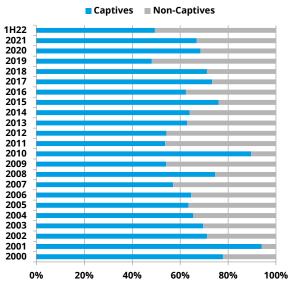


Of the total new issuance volumes in 1H22, around 5.14bn euros were issued by captives, corresponding to a 33% y-o-y decline when compared to 7.7bn euros issued in the first six months of 2021. Meanwhile, non-captives showcased a relatively improving trajectory, with issuances of 5.26bn euros and a market share exceeding 50% of the total volumes issued by European originators, contrasting to an average share of around one-fourth seen during 2017-2021 (see Figure 14).



Figure 14: Non-captives in the forefront up to the second quarter of 2022

Originators share in volume of new auto ABS issues



Source: Refinitiv, Creditreform Rating

Amongst captives, Volkswagen, the leading German automaker, dominated in terms of auto ABS originators during the first half of year, having issued 1.7bn euros, accounting for over 16% of the total market share (see Figure 15). This corresponds to nearly 60% of the issuance activity observed during the last year (2021: 2.9bn euros). The highest issuance came in despite the company facing severe supply chain issues, as Volkswagen's order backlog especially in Europe remains strong, which should continue to provide some tailwinds for issuance volumes even in the upcoming months. Meanwhile, Renault, the leading French carmaker, issued 1.2bn euros during 1H22, following its relatively strong issuances during 2021 under its Master Securitization Trust. Accordingly, Renault's share fell to about 12% from 33% in 2021.

In addition, BMW and Daimler were amongst the captives remaining active during the first half of this year, issuing 829mn and 692mn euros, respectively. Other auto majors like Ford, General Motors, Volvo, and Toyota were inactive in primary markets during the same period.

Figure 15: BBVA places non-captives ahead

The volume of new auto ABS issues in billion euros Volkswagen ■ Santander ■ Renault Daimler ■ Peugeot ■ Ford ■ Fiat BMW **■** Other Captives Other Non-Captives 35 30 25 20 15 10 5 0 2013 2014 2015 2016 2017 2018

Source: Refinitiv, Creditreform Rating

We note that from 2021 we have classified both entities Peugeot and Fiat under the umbrella of the Stellantis holding company as of 2021. Hence, we have not recorded any issuances at the subsidiary level. However, for illustrative purposes, we have treated Peugeot and Fiat separately in Figure 15 and classified Stellantis as a new originator under 'Other Captives'. Measured this way, Stellantis issued 706mn euros during 1H22.

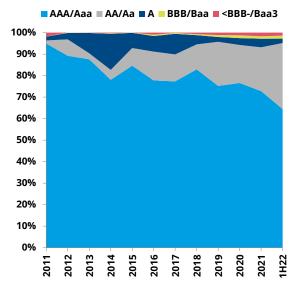
Non-captive issuance activity came in relatively stronger, reaching almost 80% of the level recorded over the full year of 2021. The issuances were largely led by BBVA offering an overall amount of 2.2bn euros representing over 40% of the total. By contrast, Santander remained absent from the primary market.



In terms of rating, AAA-rated new issuances reached 6.5bn euros, exceeding a two-thirds share in total issuance volume. That said, the cumulative share of AAA/Aaa-rated issuance has been shrinking gradually in the past few years, especially seen from 2011, with the coveted AAA rating comprising 95% of all the issuances at that time (see Figure 16). This figure has now dropped to below 70%, partly reflecting increasing higher issuance volumes of deals backed by auto finance from countries such as Spain, as well as investor appetite for higher-yielding assets across the lower rating spectrum.

Figure 16: AA-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

Meanwhile, a declining share of triple-A rating space has been captured by the higher prevalence of AA-ratings over the years. The share of double-A rating issuances rose from around 8% in 2015 to a notable 30% in 1H22. Conversely, the proportion of the single-A category continued to shrink, closing the first half of 2022 at 2.1% of all the rated issuers, after 4.0% in 2021

and 3.2% in 2020. Meanwhile, the issuance volume at the lower end of the investment grade category (BBB/Baa) and below remained just above 1% over the years.

Auto ABS spreads have widened somewhat this year as volatility engulfed markets, and underlying fundamentals took a back seat on broader macro concerns. However, these moves have been largely moderate when compared with broader underperformance of fixed income corporate debt. The extraordinary resilience of the market is mainly attributed to lower delinquencies. In addition, given the rising pressure on ratings due to an uncertain environment, companies are further strengthening the already solid structural characteristics that help them bag the title of safe havens, through credit enhancement measures. Furthermore, the natural deleveraging nature of the sector and the ability to generate solid free cash flows, combined with the high value of underlying collateral due to rising vehicle prices should prove to be credit positives underpinning the appetite for the asset class.

3. Perspectives for the issuance of European auto ABS

In recent times, the challenges posed to Europe's automobile sector appear to have far outweighed those faced by other regions globally. Despite the recovery in the automobile industry appearing distant, the auto ABS instruments have undoubtedly performed well amidst a fragile macro backdrop and even in the light of regulatory push more prominently emerging from sustainability-related concerns.

The European securitization space has been constantly evolving to protect the interest of investors and effectively integrate sustainability factors. On 02 May 2022, European Supervisory



Authorities (ESAs) published a joint consultation paper on "STS securitizations-related disclosures". The draft Regulatory Technical Standards (RTS) proposal aims to (a) facilitate disclosure by the originators of the principal adverse impacts of assets financed by STS related factors; (b) supplement the single rulebook under the Securitization Regulation as amended by the Capital Markets Recovery Package; and (c), and on the ESA's work in respect of sustainability-related disclosures in financial services under the Sustainable Finance Disclosure Regulation (SFDR).

In another development, the European Banking Authority (EBA) on 28 July launched a consultation on draft RTS specifying criteria for the underlying exposures in securitization to be deemed homogenous. The homogeneity requirement aims to facilitate the assessment of underlying risks in a pool of underlying exposures and to enable investors to perform robust due diligence. The amended regulation is to apply to all securitized asset-backed commercial paper (ABCP), non-ABCP and on balance-sheet securitization.

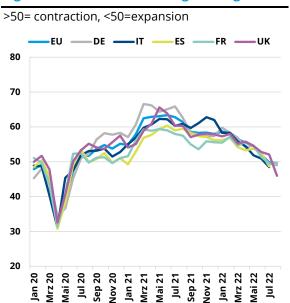
As tighter sustainability regulations in the securitization market play in the background, automakers are putting in conscious efforts by prudently responding to the emission regulations and adhering to their long-term strategies by ramping up the production of electric vehicles. The efforts have come in despite pronounced headwinds faced by the industry, in terms of acute semiconductor shortages, the protracted Russia-Ukraine war further complicates supply chains, with renewed lockdowns in China, soaring energy prices and labor shortages posing additional setbacks.

More recently, some of these supply-side issues have begun to show signs of easing, which should in turn alleviate the burden on OEMs and help revive production volumes in the automobile sector. However, this would only materialize

more gradually and hence production volumes in the second half are more likely to stay suppressed when compared to pre-Covid-19 levels.

Assessing the current scenario, business confidence has remained subdued (see Figure 17). Signaling deterioration in manufacturing conditions, Euro area's manufacturing PMI has been falling since January 2022 and, more notably, slipped into contractionary territory, i.e. below the 50-points mark, in July and August. The deepening downturn is led by a sustained fall in production mainly across basic materials and in auto sector. Germany posted the sharpest decline in output, followed by France. Moreover, increases in unsold inventory on the euro area level add to the impression of falling demand.

Figure 17: PMI Manufacturing slowing down



Source: IHS market, Creditreform Rating

While new orders in manufacturing continued to fall, softening input costs and output prices suggest that inflationary pressures may have begun to subside. Also, signs of easing in supply chains were observed as suppliers' delivery times showed some improvement, although overall remaining comparatively lengthy. The rate of job creation across the region also softened to the

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slowest pace in almost a year and a half. At this stage, it seems premature to assume that the manufacturing sector has reached a turning point.

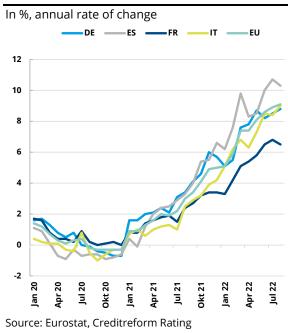
While European automakers had to deal with various supply shortages, the latest escalating geopolitical standoff between Taiwan and China could further re-intensify the global chip shortages. Should the situation worsen, the prices of several electronic products could go up drastically in some cases, bearing in mind that e.g. TSMC, the world's largest chip manufacturer located in Taiwan, accounts for roughly half of the global semiconductor production. Furthermore, the supply of battery cells also remains a medium-to-long term issue given its high concentration in China at present.

Further to more immediate economic headwinds, Russia's military aggression against Ukraine has disrupted the flow of natural gas from Russia to Europe and jeopardized price stability in the region. At present, European countries such as Germany or Italy are under considerable pressure to arrange for alternative suppliers of natural gas, having been rather dependent on Russian deliveries over recent years, which is now backfiring. Given that the auto industry has a high level of natural gas consumption, the threat of energy rationing would pose a significant headwind.

To alleviate rising concerns, the focus of economic policies is now being shifted to conserving gas and creating reserves for the upcoming winter months to prevent any blackouts or drastic cutbacks in factory production. Accordingly, European governments aim to reduce the usage by 15% across the board. Given that the auto sector will nevertheless have to continue its transition towards electric mobility, the conditions for this to happen have become considerably more difficult – and expensive. However, passing higher

costs on to consumers has become more challenging, too.

Figure 18: HICP inflation at fresh highs led by energy prices



Overall, the macroeconomic outlook has deteriorated materially since the end of 2021. Driven by the persistent rise in fuel prices, annual inflation in the euro area was confirmed at a new record high of 9.1% in August 2022, accelerating drastically from 5.1% at beginning of the year (see Figure 18). This was primarily led by energy, for which prices have leapt by 38.3% y-o-y, while food inflation has climbed to over 10%, partly also due to the knock-on effects of recent heatwaves. However, core inflation excluding energy and food continues to inch up, reaching 4.3% in August 2022 and pointing to inflation pressure becoming more broad-based. Tight labor markets and sought-after skills add to wage pressure, making a meaningful moderation in underlying inflation look unlikely at least in the near term.

This mix could give rise to an eventual de-anchoring of inflation expectations, despite current



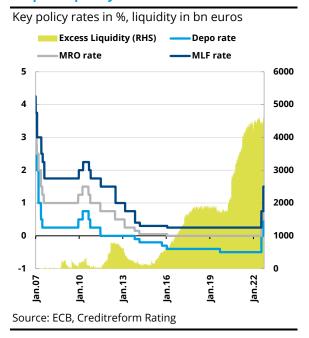
concerns over the euro area's heading for recession, thus putting the European Central Bank (ECB) under pressure. The dilemma is partly reflected in the ECB's September 2022 projections with respect to inflation and GDP growth. The inflation projections were raised to an average of 8.1% for 2022, 5.5% in 2023, and 2.3% in 2024, whilst output growth was revised lower from 3.1% in 2022 to 0.9% in 2023, with a subsequent recovery to 2.3% in 2024.

While perceived as being late to the party, the ECB now seems determined to prevent higher inflation expectations from becoming entrenched, putting high emphasis on frontloading its tightening cycle amid the challenging present circumstances, while highlighting that decisions will be data-dependent.

Exiting from its negative rates policy in July 2022, the ECB had delivered a 50 basis point rate hike in its three key benchmark rates, pointing to the necessity to continue normalizing its monetary policy stance (see Figure 19). Flanking its decision, it approved a Transmission Protection Instrument (TPI) to deal with any perceived disruption to the transmission mechanism of its monetary policy. In September 2022, the ECB announced another unprecedented rate hike of 75bps, lifting the main refinancing rate to 1.25%, the marginal lending facility to 1.50%, and the deposit facility to 0.75%.

Moving ahead, policymakers have hinted at more interest rate hikes to come over the next several meetings, making an aggregated 75bp increase by the end of the year look likely while leaving the door open for more. Meanwhile, the Governing Council intends to continue reinvesting in full the principal payments from the maturing securities purchased under the APP for an extended period of time to ensure ample liquidity conditions.

Figure 19: ECB hikes key policy rates amidst surplus liquidity



That said, the transition towards tighter monetary policy would reduce the availability of cheap alternative funding and further tighten credit conditions, resulting in a higher sacrifice ratio. In the meantime, euro area governments have offered ample fiscal support by reopening fiscal taps to cushion adverse repercussions from the Russia-Ukraine conflict. The fiscal measures are by now more tailored towards countering the rising cost of living for households and limiting energy costs for businesses.

In addition to support from widely tight labor markets, private household expenditure should thus see an expansion, despite our assumption of a substantial drag on disposable income stemming from soaring consumer prices and an high level of uncertainty over energy supply and pricing as the winter season is about to start. Even as some investment projects are likely to be postponed in this environment, investment to drive the ongoing twin transition will continue to set impulses. Overall, we expect domestic demand to contribute positively to GDP growth this



year. We currently forecast annual real GDP growth to be at 3.1% in 2022 and 1.1% in 2023.

Meanwhile, the UK economy appears to have lost steam as it marked a GDP contraction of 0.1% on quarter in three months to June 2022. Despite the lower dependence on Russian oil and gas, the UK experienced the pain of higher energy and commodity prices. The near-term outlook thus remains muted, also judging by falling consumer confidence and weakening of some indicators of business sentiment of late. The latter also occurred in a context of re-intensifying supply-side bottlenecks.

The UK manufacturing PMI recorded a sharp drop to 46 points in August 2022, driven by reduced consumer demand, delayed delivery of inputs, and labor shortages. Apart from input prices, falling employment below the 50-point mark was a major contributor as firms adjust their workforce to softening in demand conditions.

Moreover, the UKs headline inflation hit double digits in July 2022, rising to 10.1% y/y, which corresponds to the highest readings in four decades. Core inflation gathered strong momentum as well, reaching 6.2% in the same month. On the other hand, the labor market continues to display strength, with the unemployment rate at its lowest level since the mid-1970s and employment trending up again following the pandemic. With ongoing upward pressure on underlying wage growth, further rate hikes by the Bank of England (BoE) appear all but certain. In a bid to rein in inflation, the BoE at the September policy meeting delivered a seventh consecutive rate hike, on this occasion by 50 basis points, bringing the bank rate to 2.25%.

With regard to the fiscal side, to address the rising cost of living, the Chancellor of the Exchequer announced a 15bn pound support package at the end of May to alleviate the burden of high

September 2022

energy cost on private households. In addition to the planned cap on energy bills for a period of two years as part of further initiatives to support households and businesses, the measures should contribute to bolstering economic developments in the second half of the year.

For 2022, we currently project real GDP to expand by 3.6% and moderate to 0.6% in 2023. Given that we now anticipate a more aggressive monetary policy regime, our forecast for 2023 is subject to some downside risk, alongside substantial uncertainty over how geopolitical tensions will evolve.

Looking ahead, the most pressing challenges on the supply side are showing some signs of easing. Therefore, some of the pent-up demand could potentially flow through into 2022 supporting new car registrations. However, the uncertain macroeconomic backdrop characterized by elevated inflation, rising interest rates, and weakening economic growth prospects together could see households increasingly struggling with their finances as real disposable incomes begin to fall (see Figure 20).

Figure 20: Rising household consumer credit



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Recent Developments in the European Car and Auto ABS Markets



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Nevertheless, on a positive note, labor markets remain tight and the accumulation of savings during the pandemic provides buffers in the face of rising inflation. Hence, car sales both in new and used car markets can still be expected to play some catch-up even in the second half of this year. Accordingly, new issuances in the auto ABS primary market should remain supported even in the second half of 2022 underpinned by a still strong appetite from investors on the back of low default rates and elevated residual values.

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