

Creditreform Rating

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

Annual Report 2021

Financial Research
May 2022



Management Summary

1.

The European automobile sector witnessed quite a bumpy ride during 2021 while recovering from the worst pandemic situation. As economies continued to reopen, the overall rebound in sales extended into 2021 until the deepening supply shortages and the emergence of new Covid variants suppressed the vehicle market activity in the second half of the year. Despite an already low base of 2020, the new car registration in Europe (i.e. EU-27+UK) contracted by 1.9% y-o-y to reach a new low of 11.35mn units for the full year 2021. Whilst Germany contributed to the downtrend, France, Italy, and Spain clocked a stable to positive growth. By contrast, China reported a solid performance as sales reached the pre-pandemic level at 26.28mn units in 2021, reflecting growth of 3.4% primarily driven by strong demand for new electric vehicles. Likewise, US sales increased at a similar pace to 14.9mn units, a two million shortfall compared to 2019.

2.

Europe experienced a notable transition in its fuel mix as the share of electric vehicles surpassed traditional diesel-powered cars. The share of purely electric vehicles including battery electric vehicles (BEV) and plug-in hybrid vehicles (PHEVs) in total registrations doubled up to one-fifth in 2021. Notably, hybrid electric vehicles (HEVs) captured a similar share competing with diesel-powered cars. The diesel share (20%) was seen rapidly diminishing, led by the UK marking the sharpest decline amongst the key five markets, reaching 8%. Similarly, a contraction in sales of petrol-powered cars resulted in a reduced market share by 8 p.p. to 40% in 2021.

3.

The used car market continued to prove resilient compared to the new car market. New registrations endured sharp double-digit declines in 2021 compared to 2019. Used-car transactions were far less impacted, except in Italy, which reported a double-digit fall. The contractions in Germany, Spain, and the UK were below 10%, while France bounced back exceeding the 2019 levels. From the price perspective, residual values (RVs) received a substantial boost in 2H21, with average residual values sustained at the above pre-pandemic level across each of the key markets. Displaying an increase by 20%, the UK experienced the most significant rise in this respect in 2H-21. Going forward, the ongoing supply crisis and restricted used car market ensure a positive outlook for RVs.

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4.

Sharp contractions in new car sales were reflected in the muted activity in the new issuance ABS market. The issuance volumes of 21.6bn euros in 2021 were more than one-third lower compared to 2020, with most issuances originating from Germany and Italy, while activity in the UK and Spain remained relatively subdued. Looking ahead, some monetary policy tightening by the European Central Bank (ECB), although likely very gradual, should encourage firms to move towards capital markets to meet their financial requirements.

5.

Captives continued to demonstrate relatively higher resilience than non-captives in times of crisis. The market share of captives rose marginally, nearing 70% of the total issuances, and well exceeded the 10-year average of 64%. Renault remained in the forefront, raising 7.6bn euros through 2021, and represented the highest market share at 35%, followed by Volkswagen's issuance that came in at 2.9bn euros, accounting for 14% of the market share. Santander, Daimler, and BMW were among other issuers that remained active issuing 1bn euros, 1.8bn euros, and 1.5bn euros, respectively. Captive finance companies are expected to grow new vehicle loan volumes, along with an increased focus on used car financing, especially given that the supply chain issues are re-intensifying. Thus, the current backdrop seems favorable for captives in increasing the origination and securitization volumes going ahead.

6.

Higher-rated assets continued to dominate during 2021, as AAA-rated new issuances recorded at 15bn euros with a share in total volume tightening to just under three-fourth. As opposed to this, much of the share is now seen transforming into AA/Aa category as this share has risen noticeably since 2015, from about 8% to over 20% in 2021.

7.

The overall economic outlook across the euro area as well as the UK is expected to sustain the positive growth trajectory, albeit at a moderate pace, backed by adequate monetary and fiscal policy support and a strong labor market which lends some resilience to consumer demand. However, the risks remain heavily tilted to the downside due to intensifying supply-side disruptions stemming from the Russian war in Ukraine and the resulting energy crisis, adding to significantly higher inflationary pressures. We anticipate the robust demand for automobiles to persist through 2022, though supply-side constraints could pose production bottlenecks failing to meet the demand. This

could, however, favour used car demand. With rising prices of used car and collateral value, auto ABS issuances should see a modest rise into 2022 in our view. Some frontloaded activity due to the expected tighter monetary policy regime would also add to new issuances in 2022.

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1. The European Car Market at a Glance

At the onset of 2021, the global economic revival appeared set to gain traction over the course of the year, backed by the unprecedented stimulus from the governments and large-scale vaccination rollouts. Consistent with the global economic performance, the hard-hit automotive industry also regained some ground in the first half of 2021. However, supply chain disruptions intensified in the second half of the year, dampening the recovery prospects of the global automotive industry, even as consumer demand remained robust.

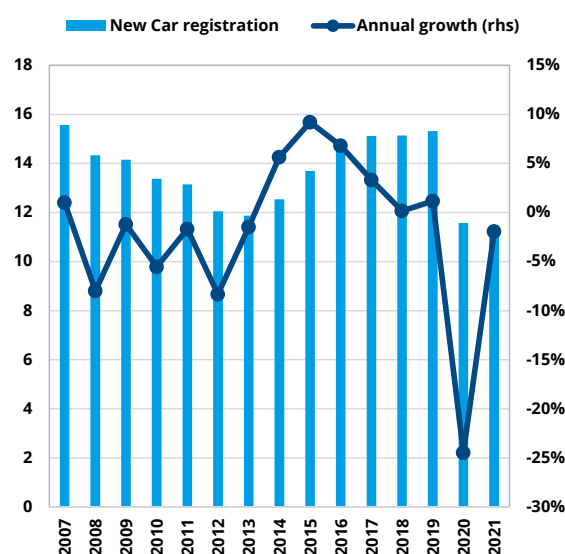
In Europe, just as glimpses of positive performance in the second quarter of 2021 raised hopes of a recovery in the auto industry, sharp declines in new car registrations were seen in the later half, as acute shortages of critical components such as semiconductor chips severed production lines, leaving the growing demand unmatched. As per the European Automobile Manufacturers Association (ACEA), registrations declined by 20% y-o-y in the second half of 2021, compared to a growth of 26% y-o-y in 1H21. Notably, the slump in sales in the second half of the year was observed in large parts of the world including China.

Looking at the full year 2021, the European automobile industry performance was the most disconcerting in light of an already low base of 2020. Led by Germany, the new car registrations in the European market (EU-27 plus UK to make the historical comparison consistent) contracted 1.9% to reach a new low of 11.35mn units since 2007 (see [figure 1](#)). By contrast, China reported a solid performance as sales reached the pre-pandemic level at 26.28mn units in 2021, reflecting a growth of 3.4% primarily driven by strong demand for new electric vehicles. In the same

vein, US sales increased at a similar pace to 14.9mn units, a two million shortfall compared to 2019. Meanwhile, India reported the strongest pace of growth (+26.7%) and surpassed the 2019 level reaching 3.08mn units.

Figure 1: European new car registrations (incl-UK) fall in 2021 despite a record low base

New car registrations in mn units

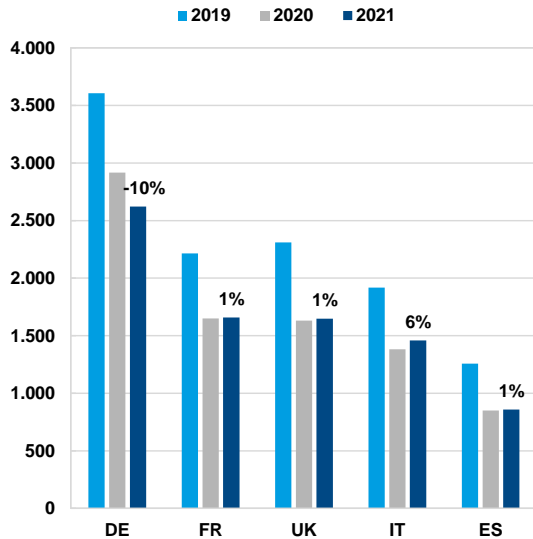


Source: ACEA, Creditreform Rating

Taking a closer look at the dismal performance of the European markets in 2021, it was chiefly Germany, the largest market in terms of volume, that contributed to the downtrend. As opposed to France, Italy, and Spain that clocked a stable-to-positive growth, Germany registered a 10.1% decline with 2.6mn units (see [figure 2](#)). The German car market remained one-third down from its 2019 level, mainly due to double-digit declines in the second half of the year (see [figure 3](#)). Nevertheless, the electric vehicle segment showcased remarkable performance with 681,900 units registered. This corresponds to a rise of 73.0% and 26.0% of total new sales, implying one in every fourth car registered was equipped with electric drive.

Figure 2: Except Germany, core EU countries + UK record stable to positive growth in 2021

In thousand units, y-o-y change in %



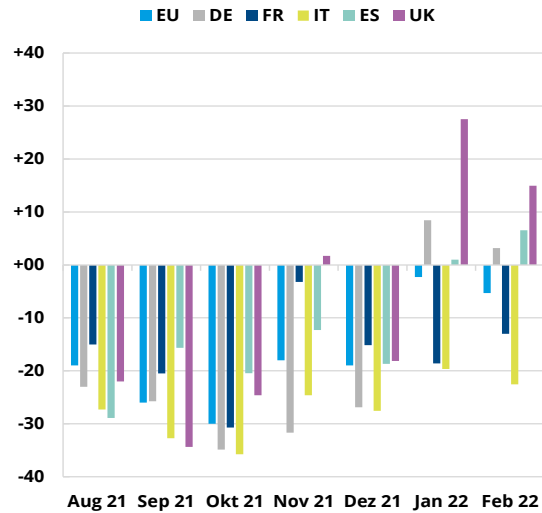
Source: ACEA, Creditreform Rating

Deepening supply issues due to shortages of semiconductors have again sparked intermittent suspension of factory operations in Germany, extending production losses into 2022. The ongoing Russia-Ukraine conflict is another factor compounding the downward trend. Hence, the German Automobile Manufacturers (VDA) initial sales forecast of 2.8mn units (+7%) for 2022 now looks quite optimistic.

Meanwhile in the UK, new car registrations were fairly stable with 1.65mn units in 2021, albeit one fourth lower than the pre-pandemic level. The UK, too, suffered from supply shortages in the final six months to December, which led to a drop in sales. There was, however, one bright spot regarding electric vehicles. Both BEV and PHEV marked significant growth of over 70%, with combined 305,218 units registered surpassing diesel-powered cars by far (135,773 units; -48%). Moreover, diesel car registrations were the lowest amongst the key markets, reflecting the country's much accelerated efforts to phase out sale of new petrol and diesel cars by 2030.

Figure 3: Supply bottlenecks dampen new car registrations in 2H21 and beyond

y-o-y change in %



Source: ACEA, Creditreform Rating

Taking cognizance of the ever-growing EV uptake, the UK government surprisingly announced to trim the incentives by nearly half (1,000 pounds) and lowered the price threshold of qualifying EVs under the scheme in 2022. The move is a second attempt in nine months to reduce reliance on subsidies. That said, the adoption of EVs could slowdown, as additional burden of subsidies now passes on to automakers, especially in an already rising inflationary environment. Moreover, the Electric Vehicle Homecharge Scheme (EVHS) is set to expire in April 2022. The extension of the same would be crucial to keep EV uptake on track and achieve net zero emission deadlines.

In comparison to its European peers, Italy outperformed as new registrations rose by 6% in 2021, despite a bumpy ride in the second part of the year. The solid performance was mainly led by the uptake of EVs as volumes nearly doubled. HEV accounted for 30% of the total share, followed by BEV and PHEV at 5% respectively. The sector benefitted from generous government schemes that offered additional incentives in 2021. Moving into 2022, the support is now due

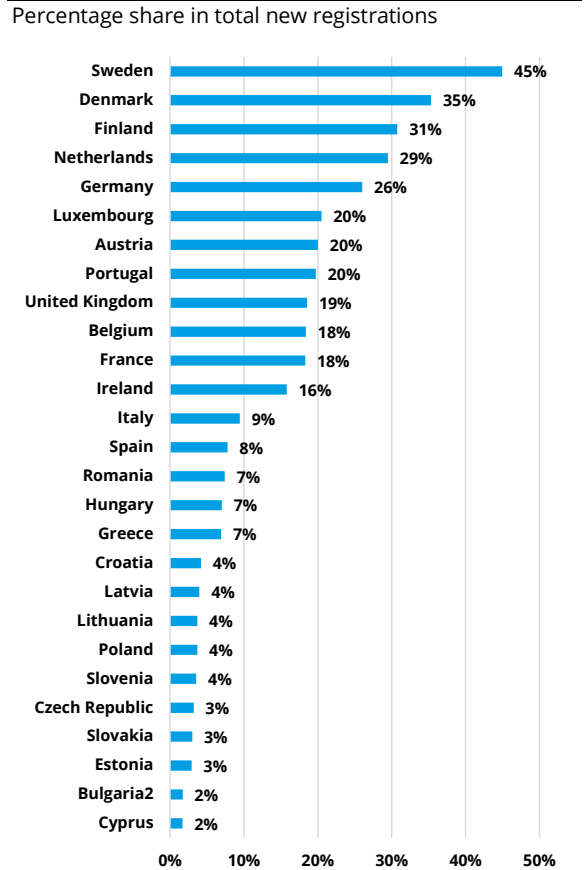
for renewal, and the government mulls over a new budget of around 8.7bn euros until 2030 to support its auto industry.

In a similar vein, the extension of EV subsidies in France until June 2022 came to the rescue during 2021. Registration of pure electric vehicles (BEV+PHEV) and hybrids achieved remarkable growth rates of over 60% and 70% respectively, which aided in achieving stable overall car registrations at 1.66mn units (+0.5%). As a result, the share of EVs rose to 18% in the same period (vs 11% in 2020).

Evidently, the European government’s solid groundwork and concerted efforts towards electrification of vehicles have been successful in shifting gears of the European car markets in 2021, despite being faced with unprecedented challenges. The proportion of electric cars has more than tripled since before the pandemic. In 2021, the five major markets, representing 70% of the total market, posted on an average 74% growth in EVs, marking the biggest leap ever.

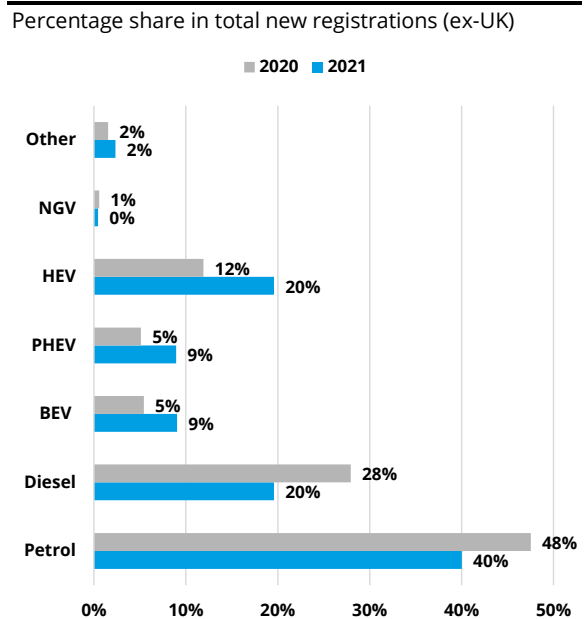
Joining the trend, many other EU nations are moving towards electrification, essentially in the Northern European markets. The electric penetration in Sweden was the highest with a 45% share, followed by Denmark and Finland which achieved a share of 35% and 31% respectively, having reported triple-digit growth. While EVs accounted for 26% in Germany, Luxemburg, Austria, and Portugal achieved a share of roughly 20%. Most Southern European countries, which have room to improve, such as Slovenia, Croatia, Greece, Romania, Bulgaria, and Poland, are on their way to catch up, displaying triple-digit growth rates during 2021 (see [figure 4](#))

Figure 4: EVs (BEV+PHEV) market penetration zoom in Europe during 2021



Source: ACEA, Creditreform Rating

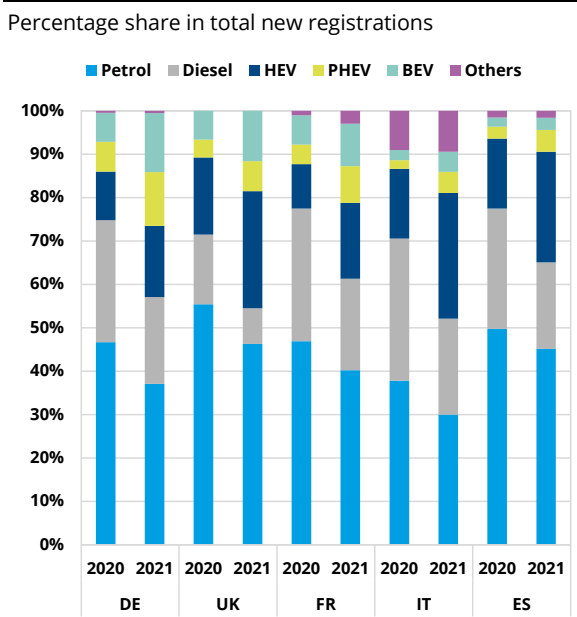
Figure 5: EVs overtake diesel for the first time



Source: ACEA, Creditreform Rating

Looking at the overall segment mix, the EU experienced a notable transition as the share of electric vehicles surpassed traditional diesel-powered cars (see figure 5). The share of purely electric vehicles including BEV and PHEVs in total registrations almost doubled up to 18% in 2021. Moreover, hybrid electric vehicles (HEVs) captured a share of one-fifth, approaching that of the diesel-powered cars. The diesel share was seen rapidly diminishing, with the UK marking the sharpest decline amongst the key five markets, to 8% (see figure 6). Similarly, new vehicle registrations in petrol contracted in 2021 (-17%) with the majority of the countries reporting a decline in sales. Accordingly, the petrol segment's market share continued to decline in 2021.

Figure 6: Rapidly changing fuel mix amongst core European markets



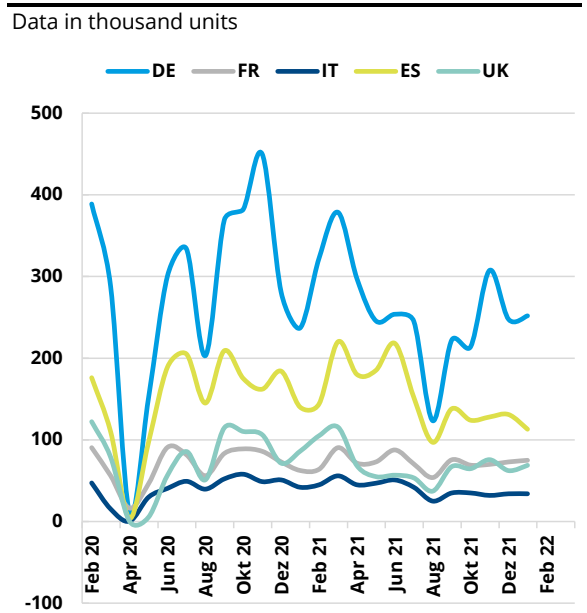
Source: ACEA, Creditreform Rating

Despite gradually rising demand, car registrations across the EU hit the lowest on record mainly due to extreme volatility on the production front. Carmakers operated at their lowest capacities due to shortages of the critical components, mainly semiconductors, and the resulting rising cost pressures as global supply chain

disruptions intensified. It may be noted that the EU accounts for only one-tenth of the global semiconductor market and is largely dependent on the Asian markets such as Taiwan and China, illustrating the concentration of the semiconductor value chain on few key markets.

The reopening of the EU manufacturing units at the start of 2021 remained short-lived. The re-emergence of new coronavirus variants resulted in prolonged shortages of parts, widespread staff absences, and factory closures, thus resisting the recovery. Having peaked in March, car output across Europe began to lose steam, registering double digit declines through the second half of the year. Car production in Germany was impaired massively as it plunged by 12% to 3.1mn units in 2021 (see figure 7).

Figure 7: Car production struggles to gain traction



Source: Marklines, Creditreform Rating

Likewise, just under 860,000 cars rolled off the assembly line in the UK in 2021, representing a contraction by 7%, and the lowest level since 1956. Based on the assumption of easing chip shortages and introduction of new car models, the independent production outlook for 2022

(prepared for SMMT by Ian Henry from Auto Analysis, released in November 2021) forecasts UK car production to increase above 1mn units, which would correspond to an increase by 19.7% over 2021.

Given the overwhelming consumer demand for cars during the year, the falling production volumes resulted in extended delivery times. This was also reflected in steeply-declining inventories of the automakers. Moreover, rising raw material costs ate into the profit margins, compelling the manufacturers to shift their focus on the production of high-end premium cars. It may be noted that high-end premium cars require a comparatively higher number of semiconductors than regular variants. Evidently, the persisting supply chain woes have led to the reassessment of management strategies and utilization of current supplies.

The automotive industry has been dealing with a series of events over recent years, struggling to regain a strong footing. However, a potential breakthrough is once again diverted with regard to the events triggered by Russia's attack on Ukraine on 24 February 2022. The crisis has jeopardized a tentative improvement regarding various supply-side bottlenecks, adding to further disruptions and thus likely hampering output growth through 2022.

So far, two of the components sourced from Ukraine and Russia are identified as most crucial to automobile industry. Ukraine is amongst the key producers of wire harnesses, accounting for about 7% of the EU imports of this product. The country mainly exports to Germany and Poland. Ukraine has about 17 wire harness facilities, and several auto suppliers are struggling to meet the demand from original equipment manufacturers (OEMs).

Auto suppliers in Ukraine were operating below half of the capacity and some of them have aligned their production lines with neighbouring

countries. As a result of the Russian invasion, the European auto production is expected to experience double-digit declines, with German players likely to be affected the most. Around mid-March 2022, Volkswagen's CEO has warned of a potential revision in its outlook in case the supply of wire harnesses gets delayed by more than 3 to 4 weeks. Adding to these challenges, Russia is a key supplier of Palladium to the global market, accounting for one-third of the total. On top of that, supply of other raw materials such as Nickel and neon gas are also set to tighten.

The war in Ukraine has exacerbated the supply woes especially across the eastern part of Europe, leading to temporary shutdowns of the factory operations. Some of the leading OEMs such as Volkswagen, BMW and Porsche have temporarily suspended their production at some of their plants in Germany. Moreover, these companies have been forced to shift operations e.g. to North Africa. Soaring energy prices pose an additional burden, thus further increasing uncertainty around the outlook for the auto production. To make matters worse, a recent earthquake in Japan led to the closure of a major semiconductor factory, hampering the short-term outlook even more.

Looking ahead, the manufacturers are evidently faced with several pressing challenges threatening the recovery of the automotive sector. Sourcing microchips is expected to remain arduous this year, and given the impact from rising prices, a return to normality is likely to take longer than previously anticipated. According to surveys, automakers expect chip shortages to persist through 2022 and to possibly last well into 2023.

In a bid to reduce dependencies in this regard, the European Commission has also proposed comprehensive measures to ensure the EU's security of supply, resilience, and technological leadership in semiconductor technologies and applications. In a first step towards achieving

digital sovereignty, the European Commission has proposed a European Chips Act, setting out strategies and associated investment. The EU is set to mobilise more than 43bn euros of public and private investments to enable the EU to reach its ambition to double its market share to one-fifth in 2030. This said, the execution and implementation will presumably take several years. Similarly, a significant improvement through announced investments of billions of euros in chips production in Germany by Bosch and Intel will take time to materialize. Hence, near-term challenges are set to persist.

In another development, the Covid-19 pandemic has once again surfaced in southeast Asia, prompting China to take drastic measures in its pursuit of a zero Covid tolerance strategy. This has led to temporary lockdowns and suspension of production at some factories in Shanghai, affecting among others Volkswagen, Tesla and Bosch, thus posing another setback to the recovery in the auto industry.

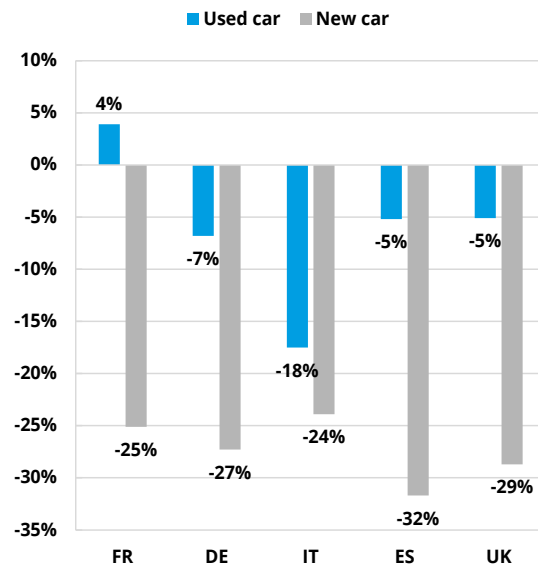
While semiconductor shortages and other supply chain issues will only gradually be resolved, the OEMs are also reeling under the pressure of the aggressive regulatory push from the European governments towards electromobility. From 2021 onwards to 2024, the manufacturers are required to comply with new carbon emission targets of 95g CO₂/km. Furthermore, the European Commission's proposals summarized under 'Fit for 55' aim for an overall more aggressive reduction in CO₂ emissions in the EU, targeting a 55% net reduction by 2030 compared to 1990 levels.

However, the OEMs are challenged with inadequate infrastructure. The number of electric cars per charging point is rising rapidly, illustrating the urgent need to align the targets for charging points with that of manufacturers. As per VDA, on average, Europe (EU+UK+EFTA) has one charging point for 887 passenger cars as of mid-2021.

Meanwhile, the used car market exhibited resilience compared to the new car market. While new registrations endured double-digit declines in 2021 compared to 2019, used-car transactions were far less impacted, except for Italy which reported a double-digit fall in this respect. By comparison, the contractions in Germany, Spain, and the UK were below 10%, while France bounced back exceeding the 2019 levels (see figure 8).

Figure 8: Used car market exuded resilience compared to new car market

Used car transactions and new registrations (percentage change in 2021 vs 2019)



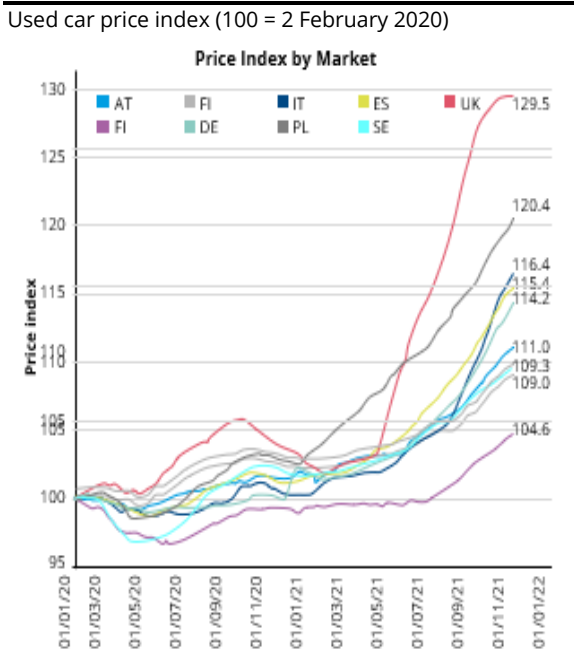
Source: AutoVista, Creditreform Rating

From a price-realization perspective, used cars showed a remarkable performance over the past two years, with a substantial boost received in the second half of 2021. Moreover, average residual values (RVs) remained above pre-pandemic levels in all European key markets. The release of pent-up demand supported the recovery as economies re-opened following lockdowns or similar restrictions in 2021. In the latter half of 2021, the price momentum accelerated significantly as the outbreak of another wave of Covid-19 and increasing supply bottle-

necks combined with rising inflation led to depressed supply of new cars and in turn reduced the used car stock.

The UK's used car market experienced the most dramatic rise in terms of residual values (see figure 9). Of the cumulative 30% increase in the past two years more than 20% occurred in latter half of 2021. The exceptional gain was due to the impact from Brexit and the prolonged shortage of semiconductors hampering new production. Limited scope for used car imports, given that UK is one of the few European markets featuring left-hand driving, added to that. Against this backdrop, the outlook for RVs in UK remains positive for 2022, despite a subdued start to the year due to supply constraints and a declining stock of used cars.

Figure 9: UK outperformed in terms of RVs in the Europe's used car market



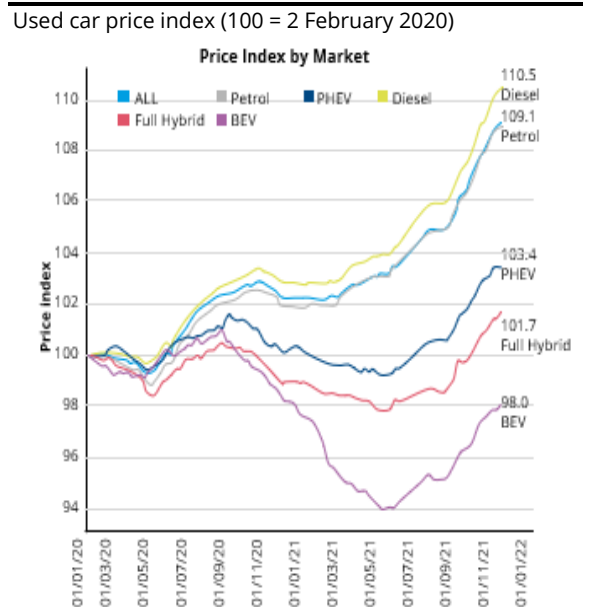
Source: Autovista, Creditreform Rating

Meanwhile, Italy displayed the second-highest increase amongst key markets, with the average RV recording increases of over 15% since the end of 2019. In terms of fuel mix, petrol and diesel cars were the most popular, with RVs in excess

of 40% of the list price. Notably, RVs of three-year-old diesel cars have reached an average 50% of the list price in the first two months of 2022 alongside a striking decline observed in used car advertisements. Amidst this rising financial pressure on consumers, a possible extension of existing or introduction of new incentive schemes by the Italian government could help to stabilize the residual values of used cars through 2022.

The uplift in RVs was seen in Spain and France as well, explained by similar reasons of acute supply concerns and drying up of used car stocks. In Spain, RVs accelerated further into 2022, as higher registration tax inflated list prices of new cars, and in turn began to feed through to used car markets. A six-months-moratorium with regard to car-registration tax ended in December 2021.

Figure 10: RVs showed a marked rise across all fuel types in France



Source: Autovista, Creditreform Rating

Meanwhile, the RV's of used cars in France showed a marked rise across all fuel types (see figure 10). Furthermore, the outlook for RVs also remains bright due to the increase in list prices

as the weight-based car-registration tax and changes in penalties (malus) have come into effect from 1 January 2022. These changes are applied to all cars emitting CO2 above the 128g/km threshold.

Germany, too, demonstrated a rise in RVs due to a below-average stock of used cars. The used diesel car market was impacted the most, due to weak fleet in 2018, that is group of vehicles owned or leased by businesses for commercial transportation, government agencies or other organisations. Alternatively, petrol cars had strong fleet in 2019 which ensured relatively less pronounced upward price pressure on petrol cars compared to diesel cars.

Overall, in Europe, the average RVs across age groups in used car markets have increased significantly, and more so for internal combustion engine (ICE) vehicles given their limited stock. Meanwhile, the price gap between new car and used-car market has meaningfully widened for electric vehicles (EVs). This is evident from considerably lower RVs for used battery vehicles due to rising volumes of new electric cars and lack of potential private buyers.

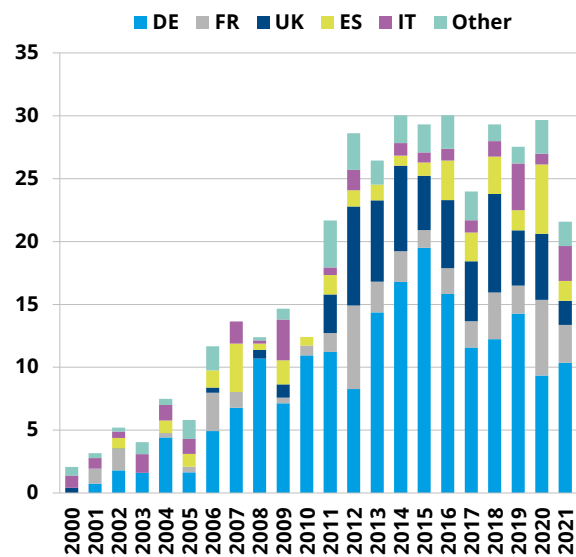
Going forward, supply-side bottlenecks and the abovementioned developments on used car markets look set to persist in the near term, in particular as the Russia-Ukraine conflict threatens to derail the recovery of supply chains. Moreover, the ongoing rapid phase-out of the ICE vehicles should continue to create supply shortages of used cars. Autovista expects a shortfall of about one-fifth in new car sales in 2022 in the major five European auto markets as compared to 2019 levels. Hence, the outlook for RVs of used cars remains positive for 2022.

2. The Auto ABS Markets in Europe

The European auto ABS issuances took a hard hit during 2021. This is attributable to sharp declines in new car registrations given pandemic-related supply disruptions and, more specifically, the semiconductor shortages. The issuance volume stood at 21.6bn euros in 2021, more than one third below the 2020 level and corresponding to the lowest reading since 2011 (see figure 11).

Figure 11: Auto ABS issuance activity in 2021 falls below 2011 level

Volume of new auto ABS issuances in billion euros, by origin of collateral



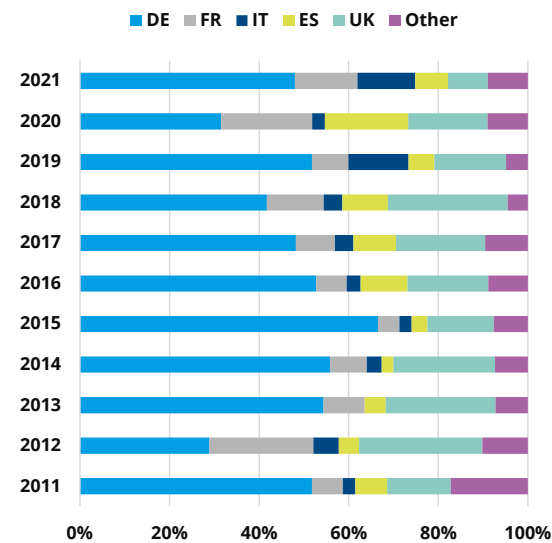
Source: Creditreform Rating, Refinitiv

In UK and Spain, issuances dropped to single-digit billions of euros in terms of volumes. By contrast, Germany and Italy emerged stronger compared to the previous year, together accounting for almost two-thirds of the total issuance volume in 2021 (see figure 12). Germany retained its largest share at 48%, recording issuances worth 10.4bn euros, up 11.4%. Surprisingly, Italy outperformed the UK and Spain with

2.8bn euros and a notable spike of 225%. However, the volume remained below its peak of 3.7bn euros reached in 2019.

Figure 12: Italy surpassed UK and Spain; Germany retained top position

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



Source: Creditreform Rating, Refinitiv

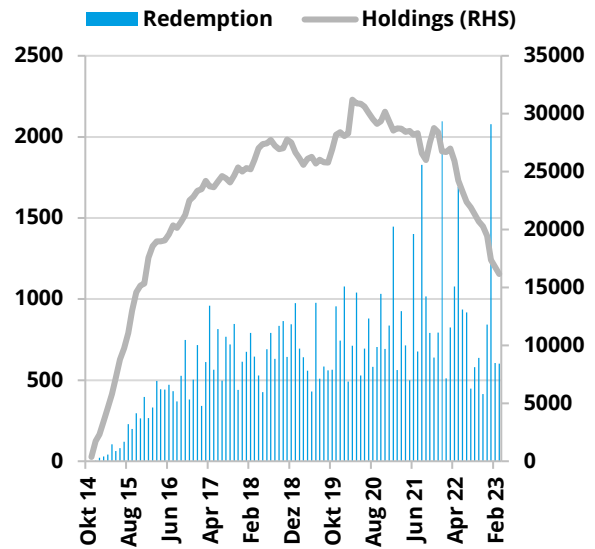
The muted new issuance activity in the auto ABS space was also owing to the heavy use of ECB funding tools, mainly the TLRTO facility. The impact of the ABSPP has been rather modest in recent years, mainly due to the low volumes of net asset purchases. Last year, the moderate stimulus should have weakened further against the background of declining net asset purchase volumes (see figure 13). Moreover, to mitigate the impact of the corona crisis, auto companies maintained a high capex discipline throughout the year and largely concentrated on conserving cash buffers.

In terms of origin of the European auto ABS issuances, captives continued to demonstrate higher resilience than non-captives in times of crisis. During 2021, the challenging market conditions evident from muted sales activity led to more than a quarter reduction in issuances from captives. Yet, market share rose marginally, nearing 70% of the total issu-

ances (69.5%), up from 68.4% in 2020 and well exceeding the historical average of 65% (see figure 14).

Figure 13: ECB's falling net asset purchase volumes under ABSPP

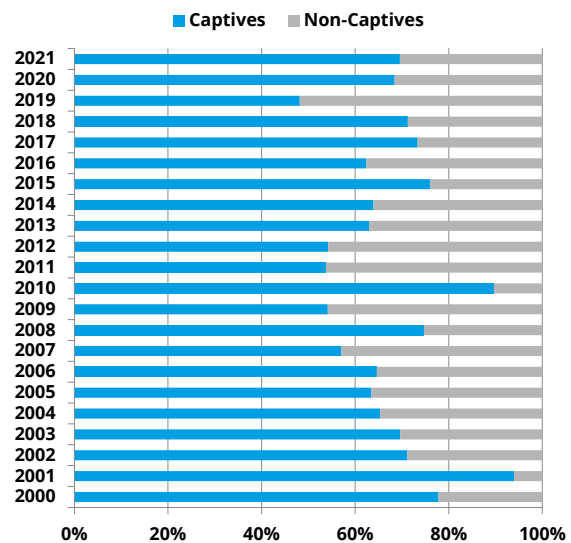
Total holdings and redemptions, In million euros



Source: ECB, Creditreform Rating

Figure 14: Captives maintain dominance

Originator share in volume of new auto ABS issues



Source: Creditreform Rating, Refinitiv

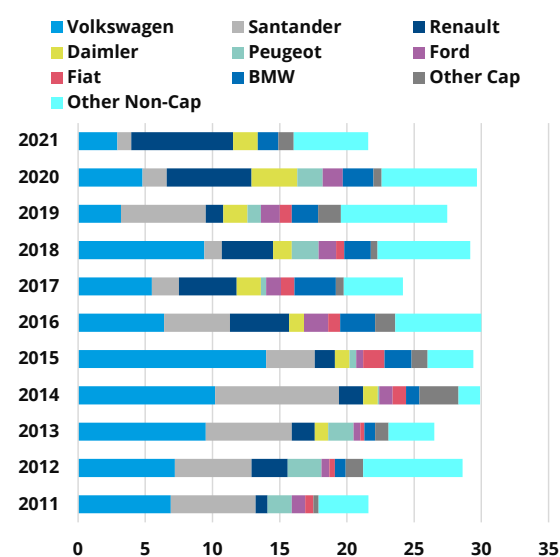
Amongst the leading issuers, Renault, the French automaker, remained in the forefront, raising 7.6bn euros through 2021, thus representing

last year's highest market share at 35%. This significantly exceeded its 14% average share over the last five years. Volkswagen issuance came in at 2.9bn euros, accounting for a mere 14% of the market compared to a five-year average of 20%.

Santander, Daimler, and BMW were amongst other issuers remaining active during the year, issuing 1bn euros, 1.8bn euros, and 1.5bn euros, respectively. However, the market share for Santander dropped to 5%, from its 5-year average of around 12%, while for Daimler it more than doubled to 9%. Meanwhile, other issuers such as Ford, General Motors, and Toyota refrained from tapping the capital market. We have not recorded any issuances from Peugeot and Fiat, as these have been under the umbrella of the Stellantis holding company since 2021. Still, we have treated Peugeot and Fiat separate in [figure 15](#) and classified Stellantis as a new originator under 'Other Captives' for the time being. Indeed, there was an Stellantis auto ABS deal in 2021, with a volume of around 0.7 bn euros.

Figure 15: Renault leads again

Volume of new auto ABS issues in billion euros



Source: Creditreform Rating, Refinitiv

Notably, non-captives accounted for a cumulative 6.6bn euros in 2021, one-third lower compared to a year ago. The issuance corresponded to a 30% share of the European market.

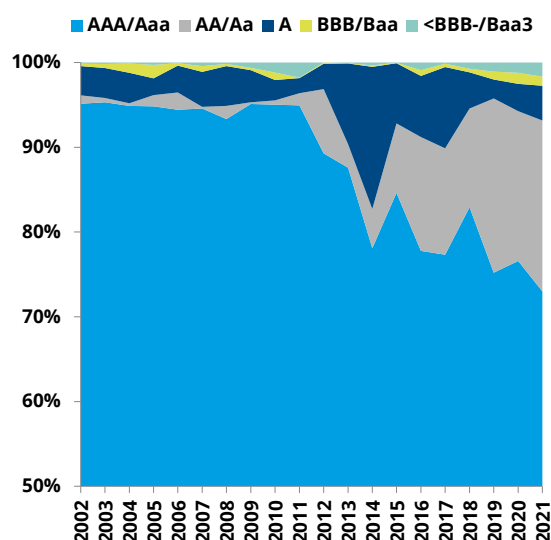
Looking ahead, captive finance companies are expected to grow new vehicle loan volumes, along with increased focus towards used car financing, especially given that the supply chain issues are here to stay for quite some time. Furthermore, demand continues to outstrip supply due to outages, and prices are continuously rising in both new and old car markets, which should generally benefit ABS collateral. Hence, the current backdrop seems favorable for captives in increasing the origination and securitization volumes going ahead, especially in times of uncertainty where auto ABS act as a relatively safer avenue for investment within the fixed income space.

Traditionally characterised as a high-quality asset class, auto ABS has fundamentally maintained its legacy over the past decade. The portion of new issuances under the coveted triple AAA category, although falling persistently, continued to hold its dominant place. The average share of triple-A rating volumes stood at roughly 80% between 2012 and 2021.

In 2021, AAA-rated new issuances recorded at 15bn euros, witnessing their share in total volume tightening to just under three-fourth (73%) from 77% in 2020 and one-fourth lower as measured against 2011 (95%). As opposed to this, much of the share is now seen transforming into AA/Aa category. The share of AA rating issuances has risen noticeably since 2015, from about 8% to over 20% in 2021. The share went up by 2.5 p.p. compared to 2020. Meanwhile, the single A rating category expanded to close to 6% in 2021, up from 4% in 2020. Moreover, the share of this rating basket was subject to somewhat higher volatility over the past few years (see [figure 16](#)).

Figure 16: AAA-rated auto ABS issuance dominates

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: Creditreform Rating, Refinitiv

Meanwhile, the issuances in the BBB and lower categories seemingly lost the momentum gained in 2019 and 2020. The share of BBB rated issuances nearly halved in 2021 to an almost insignificant 0.5%, from above 1.0% recorded in previous years, as volumes registered a sharp decline by 41% to 218mn euros.

That said, the auto ABS asset class is set to retain its high quality, given continued strong demand from investors, resulting in tightening of credit spreads when compared to e.g. treasury securities, and outstanding collateral performance. Moreover, despite the ongoing fall in auto sales, the surging prices amidst supply shortages remain a credit positive underpinning the appetite for the asset class.

3. Perspectives for the issuance of European auto ABS

Despite the challenges in the auto industry over the last few years, the European auto ABS market has fared well, with meaningful activity seen since the global financial crisis of 2008-09. Several efforts in this direction accompanied by the regulatory evolution such as the introduction of regulation on 'Simple, Transparent and Standardized' (STS) securitizations, designed as a formal framework for securitized assets, enabled establishment of a well-regulated auto ABS market, and more noticeably so over the past two years.

The securitization market is now being faced with additional challenges from climate-protection regulations. As the auto industry experiences a revolutionary shift from carbon emitting towards net zero carbon, the need for adhering to sustainability requirements of securitized assets has come to the forefront. At present, the ESG securitization market is at its nascent stage largely due to its complex nature. In 2021, just about 1bn euros worth of ABS deals qualified under the ESG labelled securitized products. This is attributed to two important factors- first, the lack of collateral in the green market and second, the absence of standardized framework.

Having said that, the ESG considerations are now emphasizing on building a rigorous framework for evaluating ESG factors in mainstream securitized products and enhancing credit risk assessment beyond traditional fundamental analysis. In November 2021, as an initial step, the European Banking Authority (EBA), undertook a review to establish a sustainability-linked framework. However, the report concluded that the data was still insufficient to outline a standardised framework and further, it would be premature to overwhelm the market with additional standardisations at the current juncture.

Eventually, the parties to auto ABS transactions will need to adopt to the fast-changing environment and keep abreast with the constantly evolving regulations going ahead. Meanwhile, fundamentals should continue to play a crucial role in determining the size and pace of the auto ABS market.

Assessing the underlying fundamentals, the recent geopolitical events are posing a drag on the auto industry. While the pandemic-induced supply disruptions had begun to show some signs of fading, Russia's war against Ukraine has put severe strains on the economy and the automotive sector. Particularly, the second-order effects – concern over energy commodity supplies and surging commodity prices- have exacerbated the troubles of the already burdened industry.

One of the prominent issues next to the semiconductor shortages, is the surging input costs and extended delivery times leading to shrinking market size. These supply side challenges are more likely to dominate the market narrative at least until a lasting truce can be established in Ukraine. Hence, the auto industry outlook remains broadly clouded.

These three important themes- inflation, the ongoing Russia-Ukraine conflict, and supply bottlenecks – will thus play a crucial role for the trajectory of the industry. The auto ABS market was off to a slow start with only few deals this year. However, the pace is expected to pick up in the second half as the collateral value of used cars increases considering the likelihood of supply constraints to persist ahead.

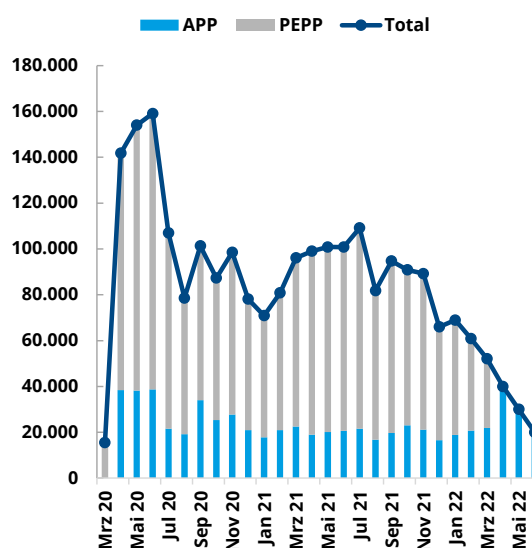
The escalating Russia-Ukraine conflict is posing downside risks to the overall economic outlook through multiple channels such as commodities, business and consumer confidence, the banking sector, and trade.

To ensure price stability and smoothen economic recovery, both monetary and fiscal authorities have once again put their armours at play. While the European Central Bank (ECB) is seemingly moving towards normalizing its policy, the fiscal authorities are playing the balancing act by adopting somewhat expansionary measures, including relief packages for private households and enterprises to ease the burden of high and rising energy prices.

In light of the significantly heightened uncertainty, the ECB may only gradually start to tighten monetary policy, maintaining a high degree of flexibility at this stage. As announced, the PEPP was terminated at the end of Mar-22 (see figure 17). Under the asset purchase program (APP), the ECB is set to calibrate the monthly net purchases to 40bn euros in April, 30bn euros in May and 20bn euros in June. For the third quarter, the calibration in net purchases will be determined in a data dependent way and reflecting the economic outlook at that time.

Figure 17: ECB seen softening cliff effect

Net monthly asset purchases, in million euros



Source: Creditreform Rating, ECB

While the tapering of the monthly net asset purchases looks likely to be concluded as soon as

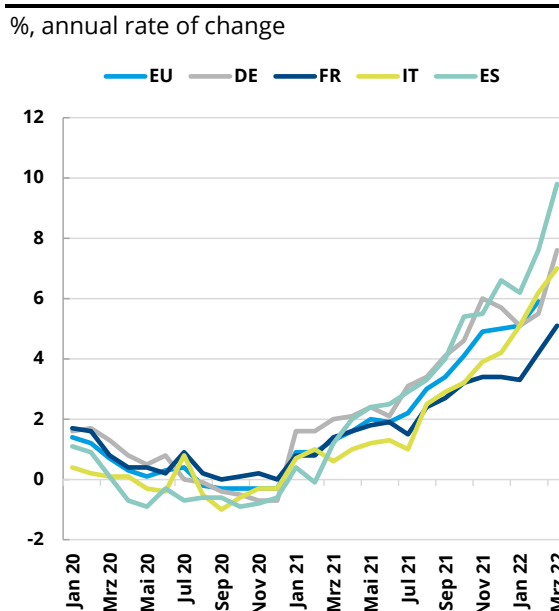
Q3-22, the Governing Council also signaled readiness to delay such a decision if deemed necessary. We consider a first rate hike towards the end of the current year the most likely outcome at this stage, but acknowledge that the probability of this happening is heavily dependent on the events around the war Ukraine. Indeed, ECB Governing Council members have signaled that interest rates may be hiked earlier this year mirroring rapidly increasing price pressures.

As the economy regains its ground, the fiscal authorities are also cautiously moving towards normalizing the public deficits. For 2021, the euro area's general government deficit declined to 5.1% of GDP, after having reached an unprecedented 7.1% of GDP in 2020 (EU-27: -4.7% of GDP, 2020: -6.8%). At the same time, public debt fell from 97.2% of GDP in 2020 to 95.6% of GDP last year (EU: 90.0% to 88.1% of GDP). Even as fiscal stimulus narrows, the overall fiscal stance looks set to remain on the expansionary side at least in the short term, added to by compensatory measures in light of high energy prices and an increase in defence capabilities.

Particularly to address the energy crisis, the EU is framing a long-term strategy to phase out its dependence on Russia for gas, oil, and coal, and is thus working on the REPowerEU plan to make proposals by the end of May. In the meantime, short-term tools have been implemented on the national level, including tax cuts on energy, subsidies to households, imposing caps on prices in France and Spain, and broader tax relief in Germany to alleviate the pressure on households and businesses. The cost of support measures announced thus ranges from about 6bn euros in Spain to over 30bn euros in Germany. The European Commission has allowed the governments to take maximum benefit of the flexibility of the suspended fiscal rules this year. Moreover, development of additional new instruments and emergency instruments at the EU level could also be considered if deemed warranted.

That said, the euro area economy continues to recover at a moderate pace at present, underpinned by investment and reform initiatives to be implemented under the Recovery and Resilience Plans (RRPs), healthy labor market development and recovering consumer demand as pandemic restrictions are lifted. However, the impact of the ongoing war in Eastern Europe is starting to feed through the economy, for now mostly visible in partly sharply deteriorating business and consumer confidence indicators.

Figure 18: HICP inflation surprises on the upside on the back of soaring energy prices

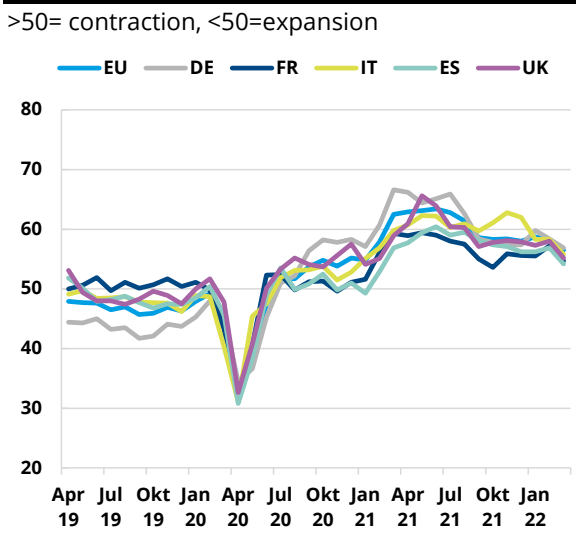


Source: Creditreform Rating, Eurostat

The surging inflationary pressures (see figure 18) are seen limiting the production activity to some extent across euro area and more so the eastern Europe, as various factors of production witness exacerbating prices. This is evident from the PMI manufacturing index, which although still quite strong, has receded to 56.5 in February having attained its peak in June, impacted by a considerable drag in input costs of raw materials (see figure 19). This continues to signal intensifying supply chain interruptions. The situation could potentially worsen further, posing headwinds to

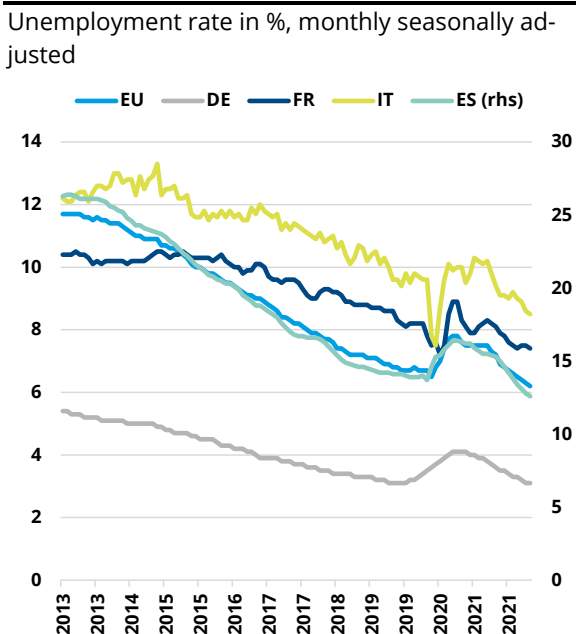
production activities amid re-intensifying shortages of materials, not least as Russia is also a leading exporter of commodities such as palladium, platinum, nickel, and aluminium. Supply-side bottlenecks could also be exacerbated by large-scale Covid-19-restrictions in China (see above).

Figure 19: PMI Manufacturing slowing down yet quite strong as economy recovers



Source: Creditreform Rating, IHS markit

Figure 20: Labor market strengthens further

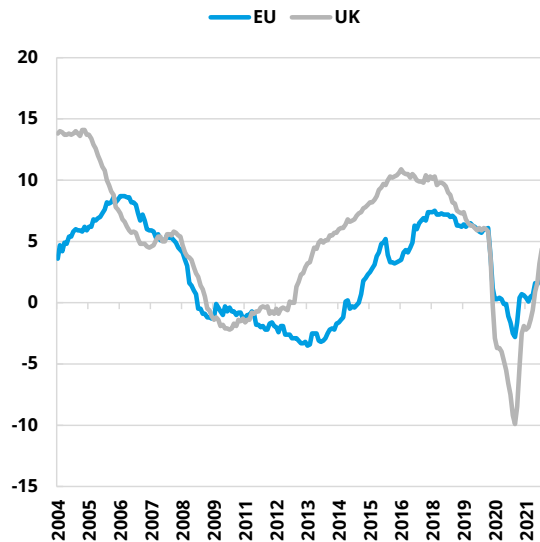


Source: Creditreform Rating, Eurostat

In addition, the buoyant consumption theme could possibly run out of steam. The tight labor market remains highly supportive as evident from February unemployment rate for the euro area at 6.2% (see figure 20). However, increasingly tight labor markets in several euro area economies appear not to be fully reflected in wage developments so far. For the wage pressure to occur on a broader basis, it would take further normalization in many areas. Moreover, wage growth is unlikely to catch up with the soaring inflation, which will eat into the disposable incomes and thereby strain private consumption. This said, household savings that were accumulated during the Covid-19 pandemic hint at remaining room for pent-up demand to be released, whilst consumer credit appears to recover more recently after experiencing a sharp pandemic-induced decline (see figure 21).

Figure 21: Recovering consumer credit

Lending to households for consumption, y-o-y growth %



Source: Creditreform, ECB, BOE

Against this macro backdrop, we still expect the euro area GDP to expand, by about 3.0% in 2022, and by 3.0% in 2023 as well. To be sure, the forecast is subject to exceptionally high uncertainty.. While catching-up effects as well as the NGEU-

related impulse could entail upside surprises, we see risks relating to the Ukraine war heavily tilted to the downside. In addition, risks to inflation seem tilted to the upside for the time being, given persistent supply bottlenecks and the ongoing Russia-Ukraine war with no end in sight.

As for the UK, the emergence of the Omicron variant that depressed activity somewhat at the beginning of the year, is likely to have had limited impact. However, the growth prospects have deteriorated sharply for 2022 due to the fallout from the Russian invasion of Ukraine. Consumer price inflation hit a 30-year high in February 2022 (6.3% y-o-y) as rising fuel costs also translated into a sharp rise in food prices.

The burden from higher cost of living is expected to intensify as the VAT for the leisure and hospitality sector returns to the standard rate of 20%. Upward revisions to fuel bill caps, excise duties, cost of stamps, water bills, rail fares, etc. effective from April onwards, are expected to further elevate price pressures on household budgets. The Office for Budget Responsibility foresees inflation pushing to a 40-year high of 8.7% in the final quarter of 2022. Meanwhile, the labor market in the UK has been robust. What is more, from April onwards the lowest paid will see the National Living wage rise by 6.6% to 9.50 pounds per hour. With the release of its Spring Statement in March 2022, the government opted to reform and cut taxes, undoing about a quarter of the previously announced tax rises (the health and social care levy and the freeze in personal allowances).

We expect UK real GDP to expand by 4.2% in 2022. We have lowered the forecast mainly due to higher inflation likely curtailing private spending and prospects of a tighter monetary policy course- if geopolitical tensions ebb. Business investments should remain supported by the super-deduction tax incentives, which is to remain effective until Q1-23. With regard to the full year

2023, we pencil in GDP growth of about 2.0%. Apart from the adverse effects from Russia's war in Ukraine, the ongoing adjustment to the post Brexit world still poses some downside risks to the economic outlook.

In order to combat the surging inflation, the BoE has raised its policy rate four times to 1.00% as of May 2022. In light of the tight labor market and persistent price pressures, the Monetary Policy Committee also kept its tightening bias, while putting stronger emphasis on possible downside risks to the economy from the geopolitical tensions.

Going ahead, the overall economic outlook across the euro area as well as the UK is expected to sustain the positive growth trajectory albeit at a moderate pace supported by adequate monetary and fiscal policy support, a strong labor market, and robust consumer demand. However, the risks remain tilted to the downside due to potentially intensifying supply-side disruptions stemming from the ongoing Ukraine-Russia war and the resulting energy crisis adding to significantly higher inflationary pressures.

We anticipate the robust demand for automobiles to persist even through 2022, thereby supporting the automobile sector, while supply-side constraints could resolve gradually in the later half if geopolitical tensions recede. Hence, auto ABS issuances could see a modest rise into 2022 and a relatively stronger demand from investors compared to 2021. The rise is expected to reflect the key factors- firstly a moderate recovery in new vehicle registrations amidst the transition towards electric vehicles and second, rising demand for used vehicles. Some frontloaded activity due to the tighter monetary policy regime would also add to new issuances in 2022. Uncertainty around these expectations remains extraordinarily high in the current environment.

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