By cap hp

July 2022

Future used car market overview

Welcome to the latest version of our overview. Our aim is to bring you the best content and layout, making it easy to identify new and revised information. As always, any customer feedback would be appreciated: e-mail dylan.setterfield@cap-hpi.com

The content is structured as follows:

- 1. Forecast Changes
- 2. Market Conditions
- 3. Historic Forecast Accuracy
- 4. Forecast Methodology & Products
- 5. Sector Reforecast Schedule 2022/23

1. Forecast changes

The overall average change in new car forecasts for ALL cars between June and July is approximately +0.1% at 36/60, which is broadly in line with the normal expectation of the seasonal change for full year forecasts at this time of year.

Details of all 36/60k forecast values revised by ±5% can be found via the following link: Monthly Reports

Sector reforecasts

This month, we publish new reforecasts for the SUV sector.

As we move through time, the first real impacts on the used car market of lower used car supply also get closer. We expect this to have an effect from around September 2023 onwards, which now falls between our one year and two year positions. As a result, we have applied changes to our deflation phasing, with an overall improvement for most sector/fuel combinations mainly influenced by improvements in the first year as the supply shortages continue for longer than originally expected.

Overall SUV deflation assumptions increased by between 2% and 3% across all fuel types and ages of vehicle, but the impact on forecast values is offset by a combination of previous adjustments and used value movements since the last review.



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Average forecasts movements are displayed in the table below.

SIZE & FUEL TYPE	UNDERLYING FORECAST CHANGE	SEASONAL ELEMENT	OBSERVED CHANGE JUNE TO JULY
Small SUV Diesel	-1.0%	-1.2%	-2.2%
Small SUV Electric (BEV)	+1.5%	-0.8%	+0.7%
Small SUV Hybrid (HEV)	+5.9%	-0.8%	+5.1%
Small SUV Petrol	+1.0%	-0.8%	+0.2%
Small SUV Plug-In Hybrid (PHEV)	+0.9%	-0.8%	+0.1%
Medium SUV Diesel	+1.8%	-1.2%	+0.6%
Medium SUV Electric (BEV)	+3.2%	-0.8%	+2.4%
Medium SUV Hybrid (HEV)	+2.7%	-0.8%	+1.9%
Medium SUV Petrol	+2.2%	-0.8%	+1.4%
Medium SUV Plug-In Hybrid (PHEV)	+3.2%	-0.8%	+2.4%
Large SUV Diesel	+2.9%	-1.2%	+1.7%
Large SUV Electric (BEV)	+3.0%	-0.8%	+2.2%
Large SUV Hybrid (HEV)	+2.5%	-0.8%	+1.7%
Large SUV Petrol	+3.0%	-0.8%	+2.2%
Large SUV Plug-In Hybrid (PHEV)	+3.8%	-0.8%	+3.0%
Overall Average	2.4%	-0.9%	1.5%

Forecast changes this month

The focus of our Interproduct reporting remains split between cases where our forecast was too far below the used value and those where recent used value reductions have resulted in forecast values above the latest used value position. This month over 100 ranges were considered, but in most cases, it was decided to make no changes to the forecasts.

In some of the examples below there were no further changes to the 36-month position, but increases were made to the 12-month position in recognition of further strength in used values that is not expected to be sustainable beyond the 12-month point. However, this month we also again needed to make some negative adjustments on a small number of models which had either seen significant recent reductions in used values, or where previous increases were reversed as a result of revised or new data.



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Forecast Changes By Generation - Interproduct June -22

BMW 1 SERIES (19-)

BMW 8 SERIES GRAN COUPE (19-) Diesel

BMW M8 GRAN COUPE (19-)

FIAT TIPO (16-)

FORD GALAXY (19-) DIESEL FORD GALAXY (21-) Hybrid

FORD GRAND TOURNEO CONNECT (13-) DIESEL

HONDA CIVIC (16-)

HONDA JAZZ (20-) HYBRID

KIA PRO CEED (18-)

KIA SOUL (19-) ELECTRIC

KIA XCEED (19-)

MERCEDES-BENZ AMG A CLASS (18-)
MERCEDES-BENZ AMG CLA CLASS (19-)
MERCEDES-BENZ AMG E CLASS (16-)

MERCEDES-BENZ CLS (18-)

MERCEDES-BENZ E CLASS CABRIOLET (17-) DIESEL

MERCEDES-BENZ E CLASS COUPE (16-)
MERCEDES-BENZ EQV (20-) Electric
MERCEDES-BENZ V CLASS (19-) DIESEL

MERCEDES-BENZ V CLASS MARCO POLO (19-) DIESEL

MG MOTOR UK MG 5 (20-) Electric

POLESTAR 2 (19-) Electric

SKODA SCALA (19-)

SKODA SUPERB (19-) Hybrid

TESLA MODEL 3

TOYOTA COROLLA (18-) Hybrid TOYOTA PRIUS (19-) HYBRID

VAUXHALL VIVARO LIFE (18-) DIESEL
VOLKSWAGEN CARAVELLE (19-) DIESEL

VOLKSWAGEN GOLF (20-) HYBRID VOLKSWAGEN PASSAT (19-) DIESEL VOLKSWAGEN TOURAN (15-)

Seasonality changes

In line with our gold book methodology, all other model ranges outside of the other changes listed above, have had their forecasts moved forward from month to month by seasonal factors which are differentiated by sector and fuel type and are based on analysis of historical used value movements.

2. Market changes

Retail demand continues to be subdued as we expected, with the cost of living squeeze the primary limiting factor. However, dealers have continues to surprise us with their desire to buy stock in the current situation, especially given the issues many have with aged stock. It seems that for now worries about future stock shortages are the dominating concern, but this is expected to once again be outweighed by reduced demand in the medium term.

The reductions from the previous high point were inevitable and despite the market firming up to an extent in the past few weeks, retail prices for many used cars remain priced above cost new and there are still a small number of cases where the trade value significantly exceeds list price. We expect the re-pricing of aged stock to continue and demand to continue to soften in the face of the cost-of-living squeeze. Therefore, reductions in used values are expected for most of the remainder of the year, albeit at a steadier rate than was originally forecast. Our expectation for where the market will be in 12 months' time remains relatively unchanged, but the underlying reasons have changed over the past few months: increases in used car volume are delayed, but the immediate market situation is likely to continue to be dominated by weaker consumer demand.

Although Omicron case rates now appear to have peaked in the majority of countries in the Asia Pacific region and the lockdowns in various cities in mainland China have largely come to an end, significant disruption remains, particularly around Shanghai. Production and logistics issues have caused delays to parts (including spares), components, systems and also batteries for BEVs. There are ongoing Covid-related impacts all across the supply chain and global supply chains remain fragile. Although semi-conductor leadtimes have broadly stabilised, chips remain in short supply. Further supply disruption seems inevitable and the timing of that disruption and location of the countries impacted is likely to be impossible to predict. In South Korea, there is also a truckers' strike which is



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causing considerable upheaval, particularly to automotive companies and steelmakers. Further Covid variants seem inevitable, but we assume that existing vaccines will continue to be effective against them.

The war in the Ukraine continues to contribute to increased raw material prices and rising global energy markets, although some manufacturers are experiencing short term increases in profits due to the maturity of commodity hedging positions on several raw materials. The temporary shortage of wiring harnesses appears to have been broadly resolved.

In summary, our view is that:

- Reductions in used values are expected to continue but at a slightly slower rate than that observed in March and
 April, albeit slightly faster than seen in May and June. Retail demand will continue to soften over the short term as
 the reality of the cost-of-living squeeze starts to make itself felt. Despite the short-term disruption, used car
 volumes will slowly increase in the coming months as fleets start to receive replacements for long overdue
 vehicles. For almost all sectors, our short-term forecasts now show negative movements for the next few months,
 with even Convertible and Coupe-Cabriolets expected to start to soften as many dealers are already stocked up for
 the summer months.
- There are still plenty of cases where logical relationships have been broken and where nearly new used values are
 above list prices. These will resolve themselves in time, but values are not expected to go down as fast as they
 have increased. We expect retail demand to continue to reduce through 2022, principally fuelled by concerns over
 the rise in the cost of living. However, we still expect a gradual market adjustment over the next 12 months or so
 and not a 'mirrored' fall.
- The used value increases on some models have effectively set a new market and may not return to previous levels, but even in these cases we have tended to apply significant negative editorial adjustments during our Interproduct and sector reviews.
- The effects of the new car supply issues (including the semi-conductor shortage) are many and varied and seem to
 be changing every week. In many cases, the news from OEMs changes every time we have the discussion. In many
 cases there are derivative specific impacts within the same model, with complex decisions regarding production
 allocation being reviewed on a daily basis. There are multiple supply issues exacerbating the situation and
 predictions from individual brands for the next few months still vary considerably and some are changing on an
 almost weekly basis.
- A significant factor still contributing to lower levels of fleet returns is fleet managers and drivers running cars for longer, due to lower mileage during the pandemic. These cars will return to the used market at some stage and we are factoring this into the phasing of our deflation assumptions for sector reviews.
- One-year-old vehicles will remain in relatively short supply for the foreseeable future and the longer the current new
 car supply issues persist, the longer there will be a shortage. However, once leadtimes for the majority of models
 reduce, it is expected that consumers will once again hold out for the new car. However, despite the prolonged
 shortages of nearly new stock, the trend for some time has been for 3-year-old cars outperforming the 1-year-old
 market and they have not increased by as large a proportion, therefore adjustments are expected to be slightly less
 than for 3-year-old cars once the market settles. This is reflected in our recent forecasts.
- After the expected low point of YOY% deflation in early 2023, values will recover over the next couple of years as
 the economy and consumer confidence improves and used supply starts to reduce (helped significantly by the
 shortfall in new car registrations that we have been seeing since March 2020).

Supply side factors

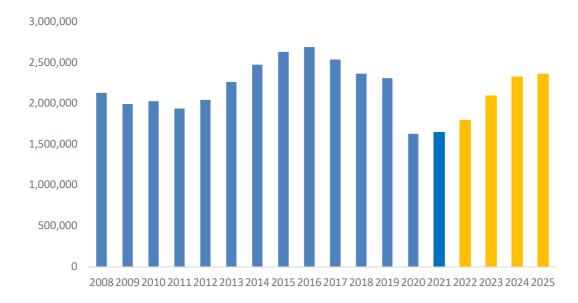
The 2021 forecast for new car registrations from the SMMT started at 1.83 million reduced in July to 1.820mm and in October revised down to 1.66mm. Our forecast followed a similar trajectory. Final results were 1.65mm – down +1.0% higher than 2020 but -28.8% down on 2019. New car supply issues will continue to limit registrations in 2022, but our original forecast for this year was an improvement to just under 1.9mm. Following the disruption of the key month of



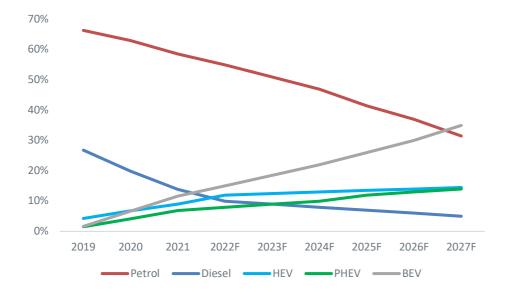
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March due to the war in the Ukraine this was again revised down to a fraction below 1.8mm (an improvement of +9% vs. 2021), although this remains -22% down on 2019 levels and remains under consideration.

Our forecast for 2022 still assumes a relatively strong recovery in the final quarter, but also assumes that some further supply issues are likely to occur. We expect that registrations will gradually increase to a level above 2.3 million registrations by 2024, but not reaching the peaks seen in 2016.



The chart below shows our updated forecast market share split by fuel type. Petrol and diesel volumes include mild hybrids. The decline in diesel will continue but is likely to slow down since it will remain the right choice for a hard-core minority of drivers and use cases.



Growth will be led by battery electric vehicles (BEVs) which we expect to become the dominant AFV type towards the end of 2022 and the largest fuel type in the market by the end of 2027. Post-Covid driving patterns (shorter and few journeys due to the increase of home working and online meetings) are likely to add to demand. The government's proposal to ban new ICE cars from 2030 will also be part of this increase, provided enough vehicle supply is made available and investment in charging infrastructure keeps pace with demand.



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Demand side factors

Latest independent forecasts for the UK economy were published on 15th May and showed further significant downgrades on the outlook for GDP for 2022 and 2023 compared to February, down by -0.4% to -0.7% respectively to 4.0% and 1.4% (compared with OBR forecasts of +3.8% and +1.8%). The Bank of England estimate is more conservative at +3.2%, but assumes deflation decreasing more quickly than the independent forecasts and being back below target by the middle of 2024. Longer-term GDP recovery improves in the independent forecasts, with GDP forecast to improve slightly from a flat +1.6% for 2024/5/6 to +1.8%, +1.8% and +2.0%, although this also partially reflects the lower growth expected in 2023.

The BoE outlook remains "uncertain", with their 'fan charts' remaining as widely spaced as they have ever been.

The chart below shows the latest GDP forecasts to 2026, alongside previous forecasts.

The latest independent unemployment forecasts are reasonably flat for the next few years, with the Bank Of England still showing a gradual increase from current levels and close to pre-pandemic levels by 2025.

Inflation continues to increase to 9.1% (from 9.0% last month, 6.2% in March and compared to the original expected peak of 4.5% in 2022) and the BoE do not now expect it to come back below target until the middle of 2024, whilst other forecasters think it will take longer. The recent increases have been driven by a combination of increased fuel and energy costs, everyday household goods, food and clothing, and current labour market imbalances, some of which are almost certainly short-term. Base rates increased by a further 25 basis points to 1.25% in June and may increase again in the near term, but are still forecast to remain low by historical standards, especially given concerns that raising rates too quickly could cause a recession, particularly since the current high inflation is primarily driven by energy prices rather than business or consumer behaviour. A significant proportion of consumers had built up considerable savings during the pandemic, but many will be cautious about their future economic stability and others have reduced financial circumstances. The BoE's May survey forecasts household savings rate to fall to historically low levels by the end of 2022 and still suggests that only 10% of accumulated savings will be spent and 75% of households do not intend to spend any at all, with those funds now earmarked to fend off the cost-of-living squeeze.



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3. Historic forecast accuracy

Since the introduction of gold book at the end of 2013, we have been able to track the accuracy of historic forecasts against current (black book) values. This tracking is longest for 12-month forecasts (tracked since January 2015) and shortest for 60-month forecasts (tracked since January 2019).

Overall, we are satisfied that accuracy results are generally been within the +/- 5% target agreed with customers but recognise that results were affected by the unexpected strength of petrol values, which started in 2017 as a result of anti-diesel press, but which fell away since late 2018, as we had always predicted. Diesel forecast accuracy has generally been within target, while petrol forecast accuracy fell outside of target during the period of strong values. In the past 12 months, our historic forecast accuracy was impacted by the strength of the used market after dealerships re-opened after the first COVID lockdown. The pausing of the market followed by significant strength on resumption (at a time when we would normally expect to see depreciation in each month) resulted in a significant short-term shift in accuracy.

Therefore, the tracking charts below all show the same general patterns, with the difference to target being less for 12-month forecasts (reforecast most recently); and being more for longer term forecasts (reforecast less recently).

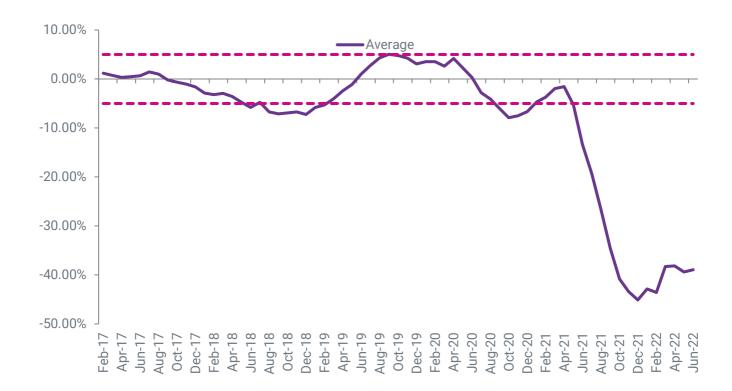
Clearly, the current unprecedented strength in the used car market is also resulting in further short-term deterioration in accuracy.

Details are shown below for 12 and 36 months, but all details are available on request.

12-month results

Since measurement started our 12 month used forecasts have averaged -6.0% less than used values across all vehicle ids, and the most recent results show June 2021 12/20 gold book forecasts being -38.9% less than June 2022 12/20 used values (unsurprising following record breaking used value increases in recent months).

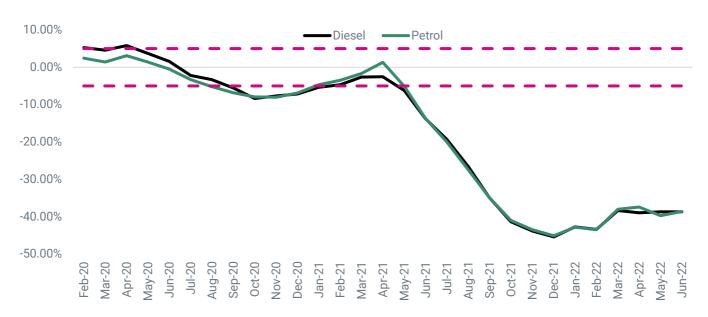
Overall results:



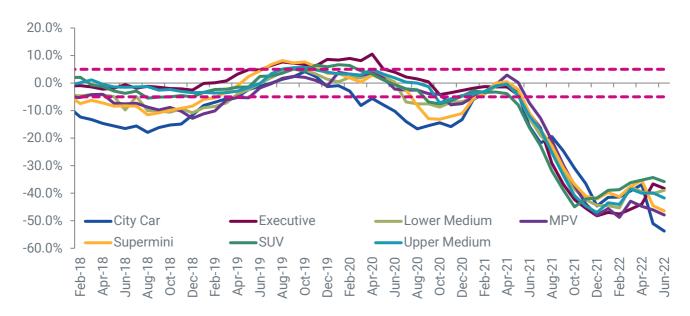


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Fuel type results



Sector results



The most recent results for the main sectors are as follows:

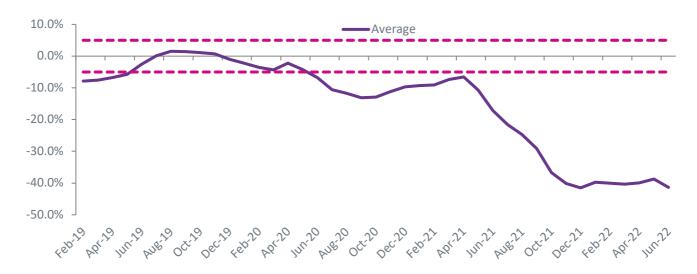
June 22	Average of Diff (%)	
City Car	-53.8%	
Executive	-38.3%	
Lower Medium	-39.0%	
MPV	-47.9%	
Supermini	-46.4%	
SUV	-35.8%	
Upper Medium	-41.7%	
Grand Total	-38.9%	

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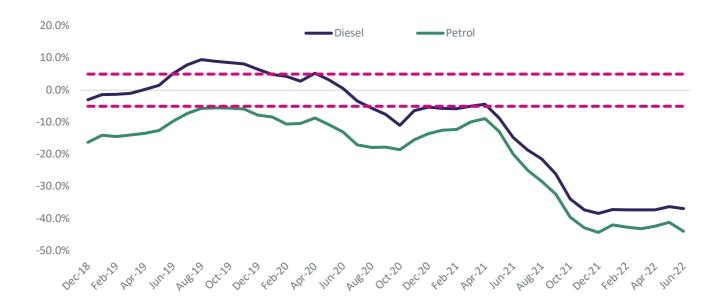
36-month results

Since measurement started our 36 month used forecasts have averaged -10.7% less than used values across all vehicle ids, and the most recent results show June 2019 36/60 gold book forecasts being -41.4% less than June 2022 36/60 used values.

Overall results:

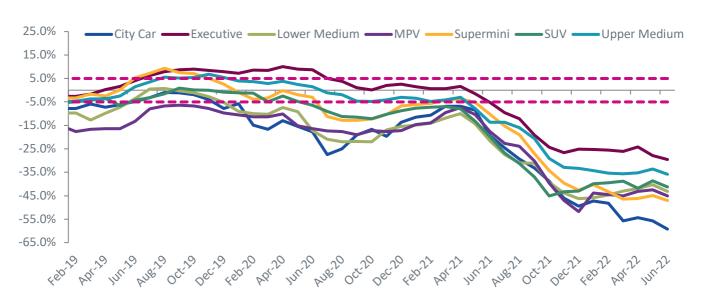


Fuel type results:



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Sector results



The most recent results for the main sectors are as follows:

June 22	Average of Diff (%)
City Car	-59.2%
Executive	-29.6%
Lower Medium	-43.1%
MPV	-45.1%
Supermini	-47.0%
SUV	-41.3%
Upper Medium	-35.8%
Grand Total	-38.8%

4. Forecast methodology and products

Overview and gold book iQ

Our values take current month used values as a starting point (uplifted for model changes where necessary), are moved forward according to age/sector/fuel specific year on year deflation assumptions regarding future used car price movements and are then subjected to additional adjustments by the Editorial Team. Finally, the values are moved forward by the next month's seasonality adjustments which are differentiated by sector and fuel type and are based on analysis of historical used value movements.

All these assumptions and adjustments are available for scrutiny to our customers through our gold book iQ product: complete transparency in automotive forecasting.

Changes may be actioned wherever there is reason to do so outside of the sector reforecast process and we continue our monthly inter-product analysis with our used value colleagues exactly as before.



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Short term forecast (0-12 months)

Our short-term forecast product, (covering 0-12 months) was launched in 2014. This is a live, researched product with a dedicated editor and filled a gap in our historical forecast coverage.

Forecast daily feed

In December 2017 we introduced a daily feed of forecasts for new models launched onto the market, so that customers do not have to wait until the next month to receive these forecasts.

Forecast output

Individual forecasts are provided in pounds and percentage of list price for periods of twelve to sixty months with mileage calculations up to 200,000. Each forecast is shown in grid format with specific time and mileage bands highlighted for ease of use.

All forecast values include VAT and relate to a cap hpi clean condition and in a desirable colour.

Parallel imports

Particular care must be taken when valuing parallel imports. Vehicles are often described as full UK specification when the reality is somewhat different. These vehicles should be inspected to ensure that the vehicle specification is correct for the UK. Parallel imports that are full UK specification and first registered in the UK can be valued the same as a UK-sourced vehicle.

Grey imports

cap hpi gold book does not include valuations for any grey import vehicles, (i.e., those not available on an official UK price list)

Reforecast calendar 2022/23

We previously accelerated our calendar of sector reforecasts, to ensure that forecasts for all sectors incorporate the latest views of the future market in this fast-changing environment. The table below shows our revised future schedule of sector reforecasts:

Monthly Product	Sector 1	Sector 2	Sector 3	Sector 4
Aug-22	City Car	Supermini		
Sep-22	Upper Medium	Executive	Large Executive	Luxury Executive
Oct-22	Lower Medium	MPV		
Nov-22	Convertible	Coupe Cabriolet	Sports	Supercar
Dec-22	SUV			
Jan-23	City Car	Supermini		
Feb-23	Upper Medium	Executive	Large Executive	Luxury Executive
Mar-23	Lower Medium	MPV		
Apr-23	Convertible	Sports	Supercar	
May-23	SUV			
Jun-23	City Car	Supermini		
Jul-23	Upper Medium	Executive	Large Executive	Luxury Executive

