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March 2023 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 <u>dylan.setterfield@cap-hpi.com</u>

The content is structured as follows:

- 1. Forecast Changes
- 2. Market Conditions
- 3. Historic Forecast Accuracy
- 4. Forecast Methodology & Products
- 5. Sector Reforecast Schedule 2023/24

1. Forecast changes

The overall average change in new car forecasts for ALL cars between February and March is approximately +3.2% 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 and includes the impact of moving to the "23" registration plate.

Sector reforecasts

This month, we publish new reforecasts for the Lower Medium and MPV sectors. Please note that we have amended our forecast schedule and will be reviewing SUVs next month for April book, with Convertibles, Sports and Supercars moving to April review for May book.

As we move through time, the first real impacts on the used car market of lower used car supply get ever closer. We expect this to have an effect from around September 2023 onwards, which now falls before our one year position. For both sectors, petrol and diesel see improvements in the first year of the forecast, year two is unchanged and year three now goes from slight inflation to slight deflation, as the future market starts to normalise following the current modest improvements to new car supply.



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Average forecasts movements are displayed in the table below

SIZE & FUEL TYPE	UNDERLYING FORECAST CHANGE	SEASONAL ELEMENT	OBSERVED CHANGE FEBRUARY TO MARCH
Lower Medium Diesel	+1.9%	+3.6%	+5.5%
Lower Medium Electric (BEV)	-3.5%	+3.8%	+0.3%
Lower Medium Hybrid (HEV)	+2.9%	+3.8%	+6.7%
Lower Medium Petrol	+1.6%	+3.8%	+5.4%
Lower Med Plug-In Hybrid (PHEV)	+1.8%	+3.8%	+5.6%
MPV Diesel	+1.7%	+3.4%	+5.1%
MPV Electric (BEV)	+0.0%	+3.8%	+3.8%
MPV Hybrid (HEV)	+0.2%	+3.8%	+4.0%
MPV Petrol	+0.8%	+3.8%	+4.6%
MPV Plug-In Hybrid (PHEV)	+0.4%	+3.8%	+4.2%
Overall Average	+1.3%	+3.7%	+5.0%

Clearly, Lower Medium battery electric models have fared worse than other fuel types. The various models have been subject to some well publicised reductions in used values and (as outlined elsewhere) there have been further significant falls across the spectrum of BEV models. Our forecasts have previously included significant negative editorial adjustments for many of these ranges - the recent reductions in used values had been expected for the models which had seen low levels of used volume or where used retail values were over cost new, however the speed of the reductions has been greater than anticipated and in some cases we have been forced to take additional action via our Interproduct reporting (as outlined below). There has also been some evidence of discounting on new cars at the end of 2022 which has clearly fuelled further used value price falls and the timing, manner and extent of Tesla's list price cuts was certainly an additional negative influence. Our expectation is that there are further adjustments to come for some models, but that the rate of price falls will now slow; some models already appear to have bottomed out and are now looking cheap in comparison to ICE alternatives. In general, models which experience significant reductions usually reach a point where they once again become attractive in the used market and values flatten out, or even rebound a little.

It should be pointed out that in February book, 12 month used values for BEV IDs were above our forecasts from a year ago, by an average of more than 14%. During February there have been further price drops and some models will now have used values below our previous forecast at 12 months, but used values for the majority of ranges remain higher than our forecast level from last year.

BEVs in the MPV sector have been much more stable, usually because they are still around in comparatively low volumes and diesel is set to remain strong for the foreseeable future. Many ranges in this sector have been discontinued, primarily because manufacturers have other reasons for not wanting to build them, although the sector has also been in a long term decline (market share in 2022 down to 1.3%, compared to 9.1% as recently as 2014).

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 (or too close to) the latest used value position. This month 98 ranges were considered, but in approximately half of cases, it was decided to make no changes to the forecasts.



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In some of the ICE 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. Many of the battery electric ranges had seen extreme movements in used values (in several cases approximately -25% since last review and including around -10% last month) and we were forced to re-evaluate our position. In some cases, this resulted in significant forecast reductions, the ranges highlighted in bold all seeing double digit decreases to the underlying 12 month forecast:

Interproduct Reporting Changes

ALFA ROMEO GIULIA QUADRIFOGLIO (16-)				
AUDI A5 CABRIOLET (19-)				
AUDI E-TRON (18-) Electric				
AUDI RS5 (19-)				
AUDI RS6 (19-)				
BMW 8 SERIES CONVERTIBLE (18-)				
BMW 8 SERIES GRAN COUPE (19-)				
BMW iX3-E (21-) Electric				
BMW M5 (17-)				
CITROEN AMI (22-) Electric				
CITROEN C3 (16-) DIESEL				
FIAT 500 (15-)				
FIAT 500 (20-) Electric				
FIAT 500C (09-)				
FIAT 500C (20-) Electric				

- FIAT PANDA (12-) HYUNDAI 120 (20-) JAGUAR F-TYPE (19-) JAGUAR F-TYPE CONVERTIBLE (19-) KIA E-NIRO (18-) Electric KIA PICANTO (17-) MASERATI GHIBLI (20-) Hybrid MAZDA MX-30 (20-) Electric MERCEDES-BENZ EQC (19-) Electric MG 3 (18-) MG MOTOR UK ZS (19-) Electric MINI COOPER (18-) MINI COOPER (19-) Electric NISSAN MICRA (16-) PEUGEOT 2008 (19-) Electric
- PEUGEOT 208 (19-) Electric PORSCHE CAYMAN (16-) RENAULT ZOE (19-) ELECTRIC SMART FORFOUR (20-) Electric SUZUKI SWIFT (17-) VAUXHALL CORSA (19-) ELECTRIC VAUXHALL MOKKA (20-) Electric VOLKSWAGEN ID.4 (21-) Electric VOLKSWAGEN ID.5 (22-) Electric VOLKSWAGEN POLO (17-) VOLVO S90/V90 (16-) DIESEL VOLVO S90/V90 (17-) VOLVO S90/V90 (17-) HYBRID VOLVO XC40 (20-) Electric

As a result of our used Interproduct reporting, we also reforecast the following ranges:

TESLA MODEL S (16-19)

Other Forecast Changes

CITROEN C3 (16-) DIESEL

Mileage profile changed to generic high mileage profile, resulting in increases in forecast values at lower than benchmark mileage and decreases in forecast value at higher than benchmark mileage. FORD FIESTA (17-22) Penalty for 1.1 [70] and 1.1 [75] engines increased, resulting in forecast decreases. HYUNDAI TUCSON (20-) Walk up review of trim, engine and transmission relationships, with varying forecast impact. HYUNDAI TUCSON (20-) Hybrid Walk up review of trim and engine relationships, with varying forecast impact. LAND ROVER DISCOVERY (16-) Walk up review of trim, engine and feature relationships, with varying forecast impact. LAND ROVER DISCOVERY (16-) DIESEL Walk up review of trim, engine and feature relationships, with varying forecast impact. LAND ROVER DISCOVERY SPORT (19-) Walk up review of trim and engine relationships, with varying forecast impact. LAND ROVER DISCOVERY SPORT (19-) DIESEL Walk up review of trim, engine and transmission relationships, with varying forecast impact. LAND ROVER DISCOVERY SPORT (20-) Hybrid Walk up review of trim relationships, with varying forecast impact.





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LAND ROVER RANGE ROVER SPORT (17-)

Walk up review of trim and engine relationships, with varying forecast impact.

LAND ROVER RANGE ROVER SPORT (17-) DIESEL

Walk up review of trim and engine relationships, with varying forecast impact.

LAND ROVER RANGE ROVER SPORT (17-) Petrol Hybrid

Walk up review of trim relationships, with varying forecast impact.

MAZDA MX-30 Hybrid (23-)

Future trends adjustments applied to align shape of depreciation curve closer to BEV range – forecast increases at 48 months onwards.

MERCEDES-BENZ AMG GLE COUPE (19-)

Walk up review of trim and engine relationships, with varying forecast impact.

MERCEDES-BENZ CLS (18-)

Walk up review of trim and engine relationships, with varying forecast impact.

MINI COOPER (18-)

Walk up review of trim and feature relationships, with varying forecast impact.

PEUGEOT 308 (13-21) DIESEL

Mileage profile changed to generic high mileage profile, resulting in increases in forecast values at lower than benchmark mileage and decreases in forecast value at higher than benchmark mileage.

ROLLS-ROYCE DAWN (15-)

Walk up review of trim relationships, with varying forecast impact.

SKODA CITIGO (12-19)

Walk up review of trim, body style and transmission relationships, with varying forecast impact.

SKODA RAPID (12-19)

Mileage profile changed to generic high mileage profile, resulting in increases in forecast values at lower than benchmark mileage and decreases in forecast value at higher than benchmark mileage.

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

Battery electric vehicles

The used market for BEVs remains extremely challenging. There had been signs since October that used volume for BEVs was increasing and concerns that not all of these vehicles were being effectively remarketed. However, demand for BEVs had been exceptionally strong and increasing through most of 2022, with no indication of the kind of reductions we have seen in recent weeks. Dealer sentiment has turned negative, with several organisations persisting with buying bans on BEVs and auction conversion rates remain lower than normal. Although it is impossible to isolate the impact of Tesla's well-publicised list price reductions, they came at a time when used values were already coming down and nearly new values were already under increased pressure, following discounting and other new car activity at the end of 2022. Although Tesla product was initially hit the hardest and will probably never recover the premium it once attracted, their models are benchmarks for many and have undoubtedly dragged the rest of the BEV market down with them. Volume will continue to increase in the coming months, but several models already appear attractively priced following the recent reductions and we expect the rate of used car price falls to slow. Some BEV models now appear to have plateaued and appear good value against ICE competitors. Conversion rates will increase once again as vendors become more realistic with their expectations on these vehicles and we expect buyers to come back into the market, although they are likely to remain cautious regarding purchase volumes (in some cases depending on existing forecourt



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exposure). However, it is also clear that some vendors have been panicking, selling well below the rest of the market and even agreeing heavily discounted batch deals to dispose of volume. Following the downward movement in prices, nearly new used values for most BEVs are now back below cost new but numerous models have further to fall, as indicated by our continuing negative editorial adjustments in our forecasts. Supply and demand for BEVs will continue to wax and wane over the longer term, but electricity prices are expected to reduce, consumers retain the desire to reduce emissions and despite the higher capital outlay (in most cases, although some models are now cheaper than ICE rivals), the cost of ownership situation will remain favourable under any sensible charging regime. There is also the prospect of new clean air zones and updates and extensions to the existing schemes, further fuelling demand for lower emission vehicles.

Remainder of the market

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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 have 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 predicted. Diesel forecast accuracy has historically been within target, while petrol forecast accuracy fell outside of target during this period of strong values. There was a brief deterioration in accuracy in 2020 when business resumed after the first lockdown and values benefitted from the release of pent up demand, but we were back on target as the market readjusted. In 2021, our historic forecast accuracy was severely impacted by the strength of the used market after dealerships re-opened in April as COVID restrictions started to be lifted. The record-breaking strength in used values on resumption of business (at a time when we would normally expect to see depreciation in each month) resulted in a significant shift in accuracy. For longer forecast durations, this will have an impact for a long time to come.

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



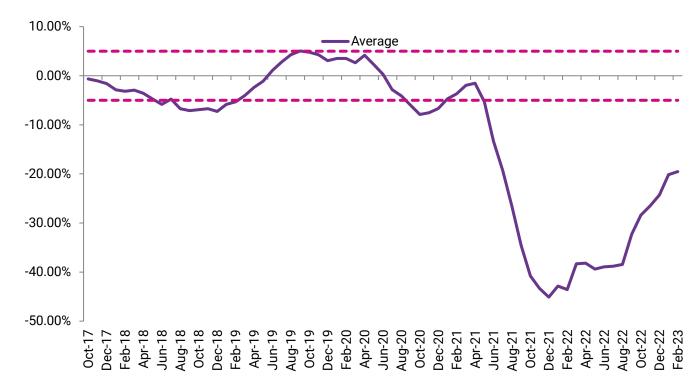
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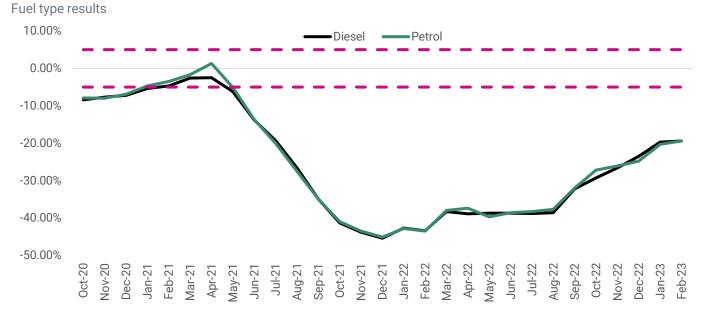
Details are shown below for 12 and 36 months, but all details are available on request.

12-month results

Since measurement started our 12 month used forecasts have averaged -7.9% less than used values across all vehicle ids, and the most recent results show February 2022 12/20 forecasts being -19.5% less than February 2023 12/20 used values (unsurprising following record breaking used value increases in recent months).

Overall results:

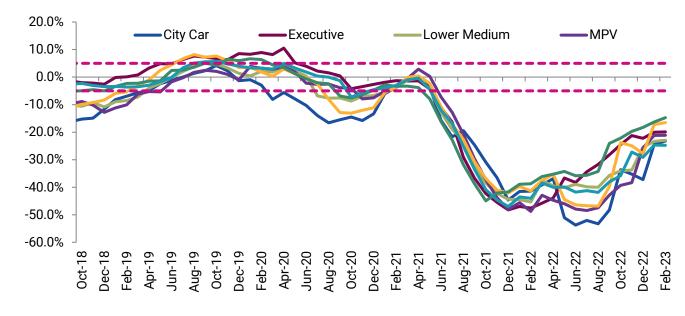




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Sector results



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

February 23	Average of Diff (%)		
City Car	-23.2%		
Executive	-19.9%		
Lower Medium	-22.9%		
MPV	-21.2%		
Supermini	-16.5%		
SUV	-14.7%		
Upper Medium	-24.8%		
Grand Total	-19.5%		

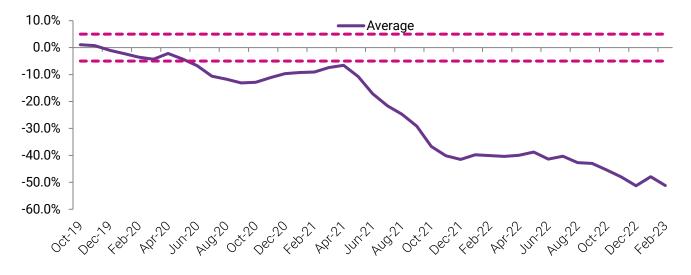
36-month results

Since measurement started our 36 month used forecasts have averaged -14.6% less than used values across all vehicle ids, and the most recent results show February 2020 36/60 forecasts being -51.2% less than February 2023 36/60 used values.

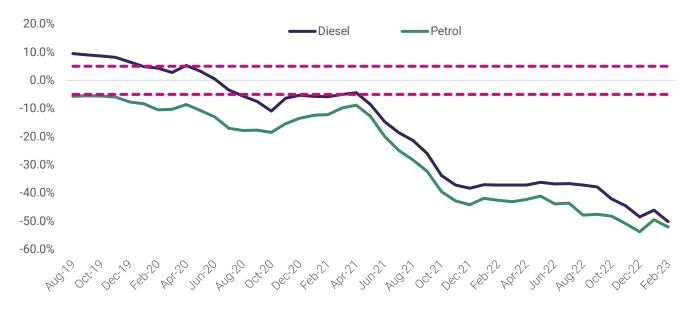


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Overall results:





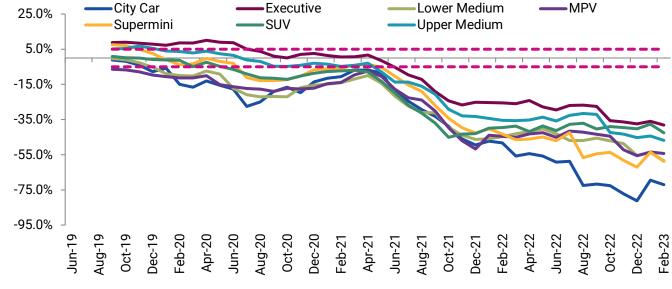




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City Car Executive 25.0% -SUV Supermini 5.0% -15.0% -35.0% -55.0%

Sector results:



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

February 23	Average of Diff (%)	
City Car	-72.0%	
Executive	-38.1%	
Lower Medium	-58.4%	
MPV	-54.2%	
Supermini	-58.7%	
SUV	-42.5%	
Upper Medium	-46.8%	
Grand Total	-51.2%	

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 interproduct 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. Values are for a "naked" vehicle and do not reflect any added option content.

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)

5. Reforecast calendar 2023/2024

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
Apr-23	SUV			
May-23	Convertible	Sports	Supercar	
Jun-23	City Car	Supermini		
Jul-23	Upper Medium	Executive	Large Executive	Luxury Executive
Aug-23	Lower Medium	MPV		
Sep-23	Convertible	Sports	Supercar	
Oct-23	SUV			
Nov-23	City Car	Supermini		
Dec-23	Upper Medium	Executive	Large Executive	Luxury Executive
Jan-24	Lower Medium	MPV		
Feb-24	Convertible	Sports	Supercar	
Mar-24	SUV			

