

June 2021

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 on this format 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
- 5. Sector Reforecast Schedule 2021

1. Forecast Changes

Sector reforecasts

This month, we publish new reforecasts for the Lower Medium, MPV, Convertible, Sports and Supercar sectors. (As mentioned previously, Electric Vehicles are now reforecast in conjunction with their associated body style sectors).

As our forecast window moves further into the future and out of the worst of the impacts of the pandemic, there have been significant improvements to our deflation assumptions. The approximate total improvements for 3-year-old vehicles are as follows (with varied changes to the phasing of the deflation):

Lower Medium Diesel +4%, Petrol +4% MPV Diesel +4%, Petrol +4% Convertible Diesel +6%, Petrol +7% Sports Diesel+3.5%, Petrol +4% Supercar +3.5%

In general, these changes partially reflect the incredible strength of demand in recent weeks and the fact that the current strength is now expected to be prolonged before the market inevitably adjusts. The monthly track of deflation is likely to be volatile for the foreseeable future and we have attempted to 'smooth' out the expected short-term impacts.

The average movements at 36/60 do not wholly reflect the change in deflation assumptions, because many models have seen larger reductions in used values than would have been expected since the last review. As has been the trend for some time, most alternative fuel versions either decreased or improved by less than the overall average.

The average movements at 36/60 do not wholly reflect the change in deflation assumptions, because some models have seen larger reductions in used values than would have been expected since the last review and others have seen such large increases that some of the positivity has been incorporated into the forecast. As has been the trend for some time, most alternative fuel versions either decreased or improved by less than the overall average. Further details are displayed in the table below.



The overall impact of the changes to forecasts for these sectors at 36/60k is shown below:

SIZE & FUEL TYPE	UNDERLYING FORECAST CHANGE	SEASONAL ELEMENT	OBSERVED CHANGE MAY TO JUNE
Lower Medium Diesel	+4.0%	-1.4%	+2.6%
Lower Medium Electric (BEV)	-1.2%	-1.7%	-2.9%
Lower Medium Hybrid (HEV)	-6.8%	-1.7%	-8.5%
Lower Medium Petrol	+0.9%	-1.7%	-0.8%
Lower Med Plug-In Hybrid (PHEV)	+0.3%	-1.7%	-1.4%
MPV Diesel	+1.9%	-1.8%	+0.1%
MPV Electric (BEV)	+2.1%	-2.0%	+0.1%
MPV Hybrid (HEV)	+0.7%	-2.0%	-1.3%
MPV Petrol	+0.8%	-2.0%	-1.2%
MPV Plug-In Hybrid (PHEV)	-3.6%	-2.0%	-5.6%
Convertible Diesel	+6.7%	-0.1%	+6.6%
Convertible Electric (BEV)	+4.4%	+0.1%	+4.5%
Convertible Petrol	+6.2%	+0.1%	+6.3%
Sports Diesel	+0.7%	-1.3%	-0.6%
Sports Petrol	+3.6%	-1.3%	+2.3%
Sports Plug-In Hybrid (PHEV)	-0.7%	-1.3%	-2.0%
Supercar Petrol	+4.4%	+0.1%	+4.5%
Overall Average	+0.9%	-1.2%	-0.4%

There have also been some minor changes to seasonality profiles, the main impact of which is a reduction in the plate uplifts applied in January, March and September.

The overall average change in new car forecasts for ALL cars between May and June is approximately -0.37% 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.

Seasonality changes

In line with our gold book methodology, all other model ranges which are outside of the sector reforecasts, have had their used forecasts moved forward from month to month by seasonal factors (without plate effect) which are differentiated by sector and fuel type and are based on analysis of historical used value movements.

2. Market Conditions

Dealerships physically re-opened on April 12th and although the initial few days of opening brought mixed feedback, demand swiftly accelerated and has resulted in record breaking increases in used values in recent weeks. Several supply issues have extended new car



delivery lead times and a combination of fewer trade-in vehicles and delayed fleet replacements have contributed to this record strength. The extension of the government's additional support for business has delayed the anticipated negative economic impacts and further lockdowns now seem unlikely, although concerns remain about the 'Indian variant' (B.1.617.1).

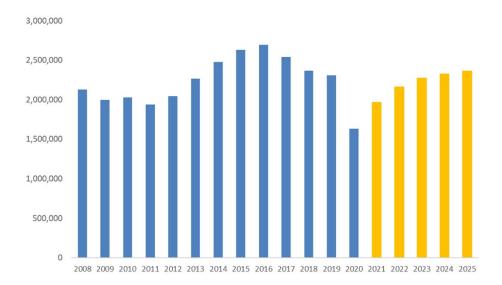
In summary, our view is that:

- Although the current strength in the used market is expected to last for several more weeks (our short term forecast shows positive movements in each of the next 3 months), a market correction at some stage appears to be inevitable. Clearly this would be accelerated if the pent-up demand becomes satisfied and consumer attention moves towards other areas such as holidays.
- The effects of the semi-conductor shortage are many and varied, with some OEMs expecting peak issues in Q3, others expecting normality by then and some not expecting any significant impact. In many cases there are derivative specific impacts within the same model, with complex decisions regarding production allocation being reviewed on a daily basis.
- Values will fall in the second half of the year, driven by higher volumes of used supply (especially the return of extended fleet contracts and overdue fleet cars, and an expected increase in the number of early terminations of consumer PCP cars) coming back onto the market at a time when consumer confidence will still be low and as government support starts to be wound down.
- One-year-old vehicles will remain in relatively short supply for the foreseeable future, and while this would normally help support their values, our view is that the dominant factor will be depressed consumer appetite for what will be a relatively expensive purchase. Therefore, their values will also be negatively impacted, albeit by less than typical ex-fleet cars (reversing the current trend of 3-year-old cars outperforming the 1-year-old market).
- After the low point, values will recover over the next couple of years as the economy and consumer confidence improves, and used supply starts to reduce (helped by the shortfall in new car registrations that we are seeing now).

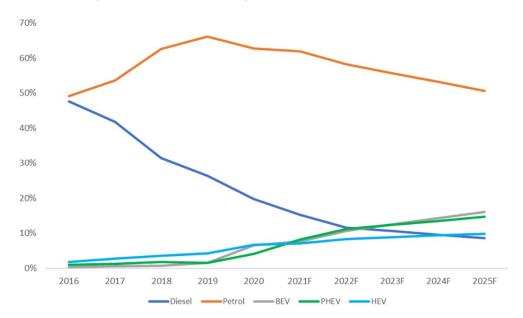
There will still be variations by sector and fuel type. We expect that smaller cheaper cars will be less impacted than larger expensive ones throughout the depressed period, as consumers remain prudent.

Supply side factors

New forecast for new car registrations from the SMMT was updated in March to 1.83mm. The chart below displays our own latest forecasts: 2021 1.902mm, 2022 2.162mm, 2023 2.270. Our forecast was revised down from 1.965mm once it was clear that dealerships would not be opening during March and remains under review – the year to date total remains on track to meet our estimate. Subject to the recovery of the economy, we expect that registrations will gradually increase to a level above 2.3M registrations a year, but not reaching the peaks seen in 2016.



The chart below shows the forecast market share split by fuel type. Petrol and Diesel volumes include mild hybrids. The decline in diesel will continue but slow down since it will remain the right choice for a minority of drivers.



Growth will be led by battery electric vehicles (BEVs) which we expect to become the dominant AFV type by 2023. 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 keep pace with demand.

Demand side factors

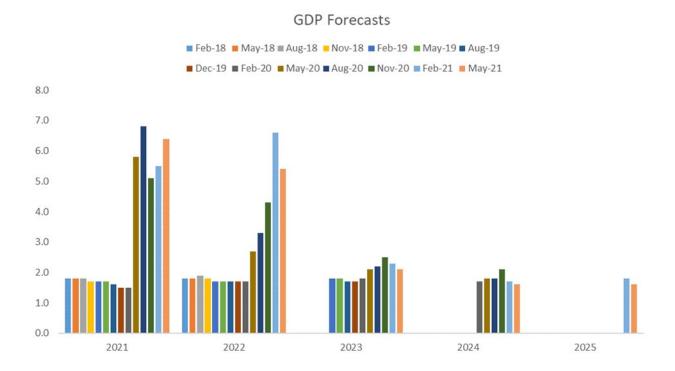
Latest independent forecasts for the UK economy were published in May and show some improvement to forecasts for GDP, but with the average of +6.4% (vs. 5.5% in February) remaining below the Bank of England estimate of +7.5%. The increases in 2021 also reflect the fall in 2020 being greater than originally estimated (and continuing into early 2021). The 2022



estimate reduces from +6.6% to +5.4% and longer term GDP recovery remains subdued with further reductions from 2023 to 2025.

Despite the forecast increase in GDP for 2021, the BoE stated view is that the risks in the short term are "heavily skewed to the downside" and the outlook remains "uncertain", with their 'fan charts' as widely spaced as they have ever been.

The chart below shows the latest GDP forecasts for 2020-2025 and previous forecasts.



The latest unemployment forecasts show a longer but flatter curve, with unemployment expected to peak at 5.4% over the next two years (rather than peaking this year); then taking several years to return close to pre-Covid-19 levels. This clearly reflects the impact of the extension to the government measures to support businesses in general and the furlough scheme in particular.

Inflation is set to peak at 3.1% in 2022 with many and varied temporary/transitional impacts, including the reversal of the VAT cut for the hospitality industry in September, increasing input costs for businesses and volatility in oil and gas prices. Base rates are forecast to remain low, but our conclusion is that consumer confidence and willingness to pay for big ticket items such as replacement cars, may be limited in the medium term due to the reduced growth and increased unemployment. A significant proportion of consumers have built up considerable savings, but many will be cautious about their future economic stability and others have reduced financial circumstances as a result of the pandemic. The BoE's surveys suggest that only 10% of accumulated savings will be spent and 75% of households do not intend to spend any at all.



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.

Our historic forecast accuracy then improved because of this cooling of petrol values during 2019, and because of historic sector reforecasts that considered petrol strength now starting to flow through into the accuracy results. This flow has happened with 12-month forecasts, is happening with 24 month forecasts, and will move on to 36, 48, and 60-month forecasts in future years.

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).

City Car forecast accuracy, followed by Supermini, have been most volatile over the long term, partly as a result of variable manufacturer behaviour regarding forced registrations, and partly because their low pound values result in relatively large percentage figures.

More recently, MPV forecast accuracy was affected by the strength in values due to demand outstripping supply; but the market has now normalised to a great extent, although some models have seen extreme reductions, partly due to the private hire sector being dormant.

Also, Executive sector forecast accuracy has recently shown our forecasts to have been too high, and again recent sector reforecasts for Executive should improve accuracy when these flow into results.

Cleary, the current unprecedented strength in the used car market will also result in further short-term deterioration in accuracy.

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



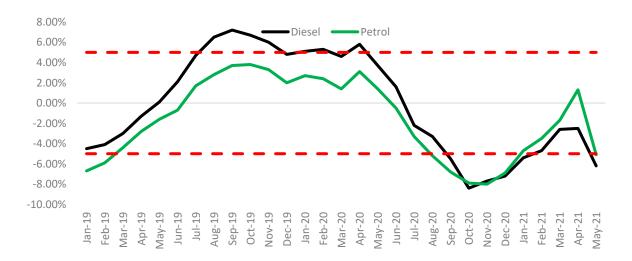
12-month results

Since measurement started our 12 month used forecasts have averaged -1% less than used values across all vehicle ids, and the most recent results show May 2020 12/20 gold book forecasts being -5.2% less than May 2021 12/20 used values.

Overall results:

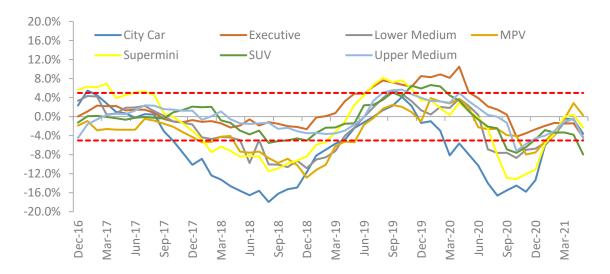


Fuel Type Results:





Sector Results:



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

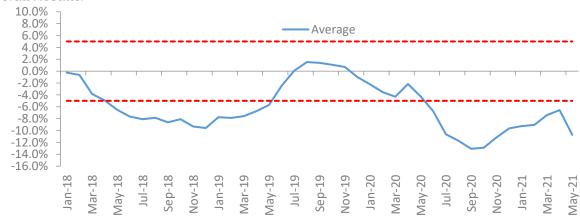
May 21	Average of Diff (%)		
City Car	-3.6%		
Executive	-4.3%		
Lower Medium	-4.4%		
MPV	0.3%		
Supermini	-2.3%		
SUV	-7.9%		
Upper Medium	-4.6%		

Grand Total	-5.28%
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36-month results

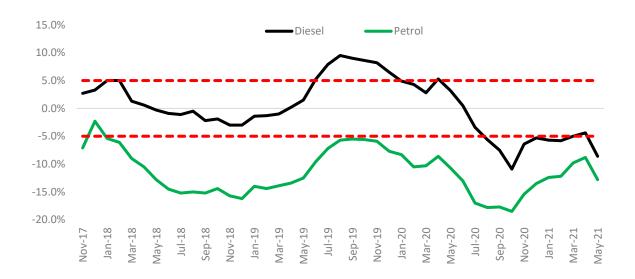
Since measurement started our 36 month used forecasts have averaged -4.9% less than used values across all vehicle ids, and the most recent results show May 2018 36/60 gold book forecasts being -10.7% less than May 2021 36/60 used values.



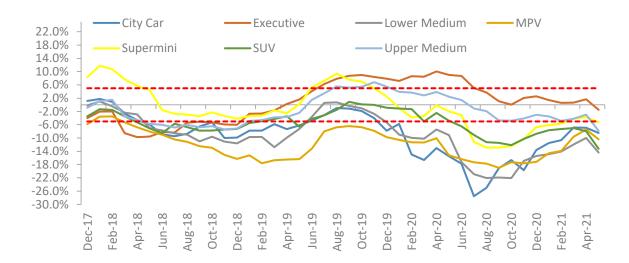




Fuel Type Results:



Sector Results:





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

May 21	Average of Diff (%)
City Car	-8.5%
Executive	-1.5%
Lower Medium	-14.4%
MPV	-10.4%
Supermini	-5.3%
SUV	-13.2%
Upper Medium	-7.9%

Grand Total	-10.7%
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4. Forecast Methodology & Products

Overview & 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.

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.

All new car prices in forecast data include VAT and delivery.

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 2021/22

We are accelerating 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. We are bringing the Sports/Convertible/Coupe Cab/Supercar sectors into next month and then no sector reforecast will take place the following month. We will then split the SUV sectors before reverting to a more normal review cycle. The table below shows our revised future schedule of sector reforecasts:

Monthly Product	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6
Jul-21	No reforecasts					
Aug-21	Small SUV					
Sep-21	Medium SUV	Large SUV				
Oct-21	City Car	Supermini				
Nov-21	Upper Medium	Executive	Large Executive	Luxury Executive		
Dec-21	Lower Medium	MPV		,		
Jan-22	Convertible	Coupe Cabriolet	Sports	Supercar		
Feb-22	SUV	,	·	·		
Mar-22	City Car	Supermini				
Apr-22	Upper Medium	Executive	Large Executive			
May-22	Lower Medium	MPV	-			
Jun-22	Convertible	Sports	Supercar			