December 2023 Future new 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 2024

1. Forecast changes

New model ranges added to our forecasts:

Mercedes-Benz CLE, Polestar 4, Volkswagen Tiguan

Model ranges to which new derivatives have been added:

Alfa Romeo Giulia, Alfa Romeo Stelvio, Cupra Born, Dacia Sandero Stepway, Jeep Avenger, Kia Niro, Mercedes-Benz A Class, Mercedes-Benz AMG A Class, Mercedes-Benz AMG C Class, Mercedes-Benz E Class, Mercedes-Benz AMG GLA, Toyota RAV4, Toyota Yaris, Volkswagen Polo, Volkswagen Taigo, Volkswagen Tiguan, Volkswagen Tiguan AllSpace, Volkswagen T-Roc

The overall average change in new car forecasts between November and December is approximately -3.06% at 36/60, which is a slightly bigger reduction than the normal expectation of the seasonal change for full year forecasts at this time of year and reflects both the above average reductions at this month's sector reviews and the relatively large number of Interproduct changes.

Sector reforecasts

This month, we publish new reforecasts for the Upper Medium, Executive, Large Executive and Luxury Executive sectors.

At this review, there were some minor changes to our deflation assumptions, involving changes to the phasing of deflation, which are similar to those actioned for other sectors over recent months.

For Executive and Large Executive, year 2 worsens by approximately -0.5% and year 3 worsens by around -1%, resulting in a -0.5% forecast decrease at 24 months and -1.5% from 36 months onwards. Luxury Executive worsens by -1% from year 3 onwards.

Upper Medium Petrol worsens by -1% in year 2 and year 3, resulting in a -1% impact at 24 months and -2% from 36 months onwards. Upper Medium Diesel worsens by approximately -0.5% in year 2 and by around -1% in year 3, resulting in a -0.5% forecast decrease at 24 months and -1.5% from 36 months onwards.

This partially reflects the fact that we are moving through time and is aligned to the overall expectations for the used market published elsewhere in this document and discussed in our customer webinars.



By can hni

Average forecast movements are displayed in the table below.

SECTOR & FUEL TYPE	UNDERLYING FORECAST CHANGE	SEASONAL ELEMENT	OBSERVED CHANGE NOVEMBER TO DECEMBER
Upper Medium Diesel	-4.8%	-0.7%	-5.5%
Upper Medium Electric (BEV)	-4.8%	-1.7%	-6.5%
Upper Medium Petrol	-3.9%	-1.7%	-5.6%
Upper Med Plug-In Hybrid (PHEV)	-5.7%	-1.7%	-7.4%
Executive Diesel	-5.9%	-1.3%	-7.2%
Executive Electric (BEV)	-5.1%	-1.1%	-6.2%
Executive Hybrid (HEV)	-4.5%	-1.1%	-5.6%
Executive Petrol	-4.7%	-1.1%	-5.8%
Executive Plug-In Hybrid (PHEV)	-5.0%	-1.1%	-6.1%
Large Exec Diesel	-3.1%	-1.7%	-4.8%
Large Exec Electric (BEV)	-4.2%	-1.5%	-5.7%
Large Exec Hybrid (HEV)	-0.1%	-1.5%	-1.6%
Large Exec Petrol	-4.2%	-1.5%	-5.7%
Large Exec Plug-In Hybrid (PHEV)	- 3.7%	-1.5%	-5.2%
Luxury Executive Petrol	-3.3%	-0.6%	-3.9%
Luxury Executive Electric	-1.8%	-0.6%	-2.4%
Luxury Exec Plug-In Hybrid (PHEV)	-8.0%	-0.6%	-8.6%
Overall Average	-4.6%	-1.3%	-5.9%

There is less variation by fuel type than we normally see and this is partly a reflection of the overall market adjustment which is currently underway. It should also be noted that several of the sector/fuel type combinations only consist of 3 or 4 vehicle ranges. Despite the fact that battery electric vehicles have now performed better than traditional fuel types in the past four months, forecasts have reduced broadly in line with other fuel types. There are very few of the BEV models in these sectors where we are able to draw comparisons with an ICE equivalent and in some cases data also remains scarce and is unlikely to increase significantly in the coming months and years. Where we are able to do comparisons with ICE vehicles, we still feel a premium over ICE is deserved, primarily due to TCO benefits, but we are often unable to implement this due to the magnitude of positive adjustments required being prohibitive. Conversely, reduced ICE used volumes are expected to prevent the level of reductions in petrol/diesel values required in many cases to reinstate the expected relationships.

It should also be noted that there are some BEV models where we retain significant negative adjustments in our forecasts as we believe they still have some way to fall.

There were no changes to mileage profiles for current ranges.

Forecast changes this month

The focus of our Interproduct reporting has remained focused on those ranges where our forecasts were now above the latest used value position. This month 111 ranges were considered, but in just a handful of cases it was decided to make no changes to the forecasts. There are still a small number of ranges where the forecasts were marginally





By cap hpi

above used values at our monthly deadline – the forecast analysis in these cases involve many different elements and is quite time consuming. This, combined with the used value reductions accelerating during the second half of the month, limited how much could be completed in time for December publication. We expect that a significant number of ranges will again be reviewed next month, together with new cases which arise during December. Almost all of the examples below involved changes at all ages of the forecast. In some cases, we have not applied adjustments to reflect the most recent used value reductions, as we expect some of them to be short term in nature and values to stabilise to some extent. There have been further disturbances to logical relationships and we are also closely monitoring retail data for signs of which elements are likely to be continued and which ones are likely to revert back to something more in line with normal expectations.

Interproduct Reporting Changes

ALFA ROMEO STELVIO QUADRIFOGLIO (18-) AUDI Q5 (16-) DIESEL AUDI SQ2 (19-) BMW iX1 (22-) Electric BMW X3 (19-) Petrol Hybrid BMW X4 (18-) DIESEL BMW X5 (19-) PETROL HYBRID CITROEN C3 AIRCROSS (17-) CITROEN C3 AIRCROSS (17-) DIESEL CITROEN C4 (20-) CITROEN C5 AIRCROSS (18-) CUPRA FORMENTOR (20-) CUPRA FORMENTOR (20-) Hybrid DS DS3 CROSSBACK / DS3 (19-) DS DS3 CROSSBACK / DS3 (19-) Electric DS DS7 CROSSBACK (17-) Diesel FIAT TIPO (16-) FORD ECOSPORT (17-) FORD KUGA (19-) FORD PUMA (19-) HONDA CR-V (18-) Hybrid HYUNDAI BAYON (21-) HYUNDAI IONIQ 5 (21-) Electric HYUNDAI KONA (17-) HYUNDAI KONA (18-) Electric HYUNDAI KONA (19-) Hybrid HYUNDAI TUCSON (20-) JAGUAR E-PACE (17-) JAGUAR E-PACE (17-) DIESEL JAGUAR F-PACE (20-) JAGUAR F-PACE (20-) Hybrid JEEP COMPASS (17-) JEEP RENEGADE (18-)

KIA EV6 (21-) Electric LAND ROVER DEFENDER (19-) LAND ROVER DISCOVERY SPORT (19-) LAND ROVER DISCOVERY SPORT (19-) DIESEL LAND ROVER DISCOVERY SPORT (20-) Hybrid LAND ROVER RANGE ROVER EVOQUE (18-) LAND ROVER RANGE ROVER EVOQUE (18-) DIESEL LAND ROVER RANGE ROVER EVOQUE (20-) Hybrid LAND ROVER RANGE ROVER VELAR (17-) DIESEL LAND ROVER RANGE ROVER VELAR (20-) Hybrid LEXUS RZ (22-) Electric LEXUS UX (18-) Petrol Hybrid LEXUS UX (20-) Electric MASERATI GHIBLI (13-) MASERATI GHIBLI (20-) Hybrid MAZDA 3 (19-) MAZDA CX-5 (17-) MAZDA CX-5 (17-) DIESEL MERCEDES-BENZ A CLASS (18-) MERCEDES-BENZ A CLASS (19-) Hybrid MERCEDES-BENZ AMG C CLASS (22-) MERCEDES-BENZ EQA (21-) Electric MERCEDES-BENZ EQB (21-) Electric MERCEDES-BENZ EQC (19-) Electric MERCEDES-BENZ GLA CLASS (20-) MERCEDES-BENZ GLA CLASS (20-) Hybrid MERCEDES-BENZ GLB (20-) Diesel MG MOTOR UK HS (19-) MG MOTOR UK ZS (17-) NISSAN JUKE (19-) PEUGEOT 2008 (19-) PEUGEOT 2008 (19-) Electric PEUGEOT 3008 (16-)

PEUGEOT 3008 (19-) Petrol Hybrid PEUGEOT 5008 (17-) DIESEL PORSCHE CAYENNE (18-) HYBRID PORSCHE CAYENNE COUPE (19-) RENAULT CAPTUR (19-) RENAULT MEGANE E-TECH (22-) Electric

SEAT ARONA (17-) SEAT IBIZA (17-) SEAT LEON (20-) Hybrid SEAT TARRACO (18-) SEAT TARRACO (18-) Diesel SKODA KAMIQ (19-) SKODA KAROQ (17-) SKODA KAROQ (17-) Diesel SUZUKI IGNIS (16-) SUZUKI S CROSS (21-) VAUXHALL GRANDLAND X (17-) VAUXHALL GRANDLAND X (17-) DIESEL VAUXHALL GRANDLAND X (19-) Petrol Hybrid VAUXHALL MOKKA (20-) VAUXHALL MOKKA (20-) Electric VOLKSWAGEN GOLF (20-) VOLKSWAGEN GOLF (20-) HYBRID VOLKSWAGEN TAIGO (21-) VOLKSWAGEN T-CROSS (19-) VOLKSWAGEN TIGUAN (16-) VOLKSWAGEN T-ROC (17-) VOLKSWAGEN T-ROC (17-) Diesel VOLVO C40 (21-) Electric VOLVO XC40 (17-) VOLVO XC40 (19-) Hybrid VOLVO XC40 (20-) Electric



By cap hpi

Other Forecast Changes

SUZUKI SWACE (20-) Hybrid

Penalty for 1.8 [122] engine increased from £225 to £475 and range reforecast following customer query, resulting in forecast increases for the 1.8 [140] engine.

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

Used car price reductions during October and November

The market realignment has continued this month and has again seen some extraordinary changes in used values. Although remarketing performance remains well below what would normally be expected in terms of performance against cap Clean, there have been some tentative signs on some models that some level of stabilisation is on the way and feedback from some larger vendors is less negative than at the same time last month. As mentioned in our customer webinars, we expected used value reductions through the final guarter of the year to be heavier than normal seasonal movements, but the speed of the reductions in the past 6 weeks has been considerably faster than expected, with November's final monthly movement coming in at -4.2%; the joint biggest November fall on record (previous highest was -4.2% in November 2009). Some models have fallen so far in a matter of weeks that some level of stabilisation is expected, whereas any models which see increased volume coming to market are likely to see further drops in value. Behaviour of retailers is also likely to determine which vehicles have further to fall - some dealers are setting retail prices in line with what is being advertised, while others are simply applying a standard margin to the prices that cars have been bought for. As previously explained, we are now most of the way through a period where bulging order banks at the largest fleets are being fulfilled, resulting in a short-term glut of used volume. This is likely to ease as we enter 2024 and the further the year progresses, the more the market will feel the benefit of reduced new car registrations through the pandemic translating into lower levels of used car supply and subsequent improvements in used values.

The ban on sales of new ICE cars and LCVs moves from 2030 to 2035

In September, the UK government unexpectedly pushed the date for the phasing out of new petrol and diesel vehicles by five years to 2035. Although this action came as a surprise, we had already assumed that this would happen after the next general election, with the next government blaming the current administration for not doing enough to make 2030 a realistic proposition. Ultimately, we do not expect this to have any unanticipated impact on the used market for either BEVs or ICE vehicles, especially since the Zero Emission Mandate is being implemented as originally planned from the 1st January 2024, requiring OEMs to meet a minimum proportion of 22% BEV. It should be noted that there are detailed 'flexibilities' available to manufacturers and some have already indicated to us that they are planning to avail themselves of different options as they will not meet the required proportion in 2024.

Battery electric vehicles

The used market for BEVs is likely to remain extremely complex for some time. The high prices which were fuelled by extremely strong demand in the middle section of last year are a distant memory; increased used volume and a multitude of issues impacting demand combined to bring the 'perfect storm', resulting in the eye-watering decreases in used values which started over a year ago, with several models falling in value by more than -40% and a handful more than -50%. BEVs are down -36% Year Over Year at 36/60 but this has stabilised in the past couple of months. It was not a surprise that values came down. If anything, the most surprising element was just how long values had remained strong during 2022, but the speed of reduction some months ago was brutal. In the past four months,



By cap hpi

however, many models have continued to stabilise or increase slightly in value as the used market for BEVs has outperformed other fuel types – overall, price reductions for BEVs in November were again slightly favourable to both petrol and diesel, September's advantage was +1.0%, October's was +1.9% and November's looks to be around +1%.

Volume of BEVs will continue to increase in the coming months, but many models already appear very attractively priced following the previous reductions and we expect the rate of used car price falls to continue to slow. Buyer demand in the used marketplace is back to previous levels and although a small number of buyers remain selective, demand is considerably higher than it was a few months ago and is expected to remain robust, especially for models at the lower end of the price spectrum. On average, trade prices for the majority of battery electric models remain below conventionally fuelled versions of the same model (where both fuel types are available). This is the case across all ages and by an average of -11.7% at 48/40 and this has now filtered through into retail prices. Extreme variation in remarketing performance persists; it is still fairly common for performance of individual BEV models against clean to vary between 80% and 120%, although this is much less than the variation seen for many volume petrol and diesel models in the past six weeks.

Following the downward movement in prices, nearly new used values for almost all BEVs are now back below cost new but some models still appear to have further to fall, as indicated by our continuing negative editorial adjustments in our forecasts. However, in some cases we have now applied small positive adjustments in the expectation of a modest recovery in values and a realignment against ICE equivalents, or we have not applied the full used value reductions seen to date in our Interproduct reforecasts. Supply and demand for BEVs will continue to wax and wane over the longer term, but consumers retain the desire to reduce emissions and even in the minority of cases where there is a higher capital outlay, the cost of ownership situation will remain favourable under any sensible charging regime. Despite criticisms of the expansion of the ULEZ in London, there is still the prospect of new clean air zones (for example in Glasgow) and updates and extensions to the existing schemes, further fuelling demand for lower emission vehicles. There are signs that retail prices are now reflecting some of the reductions in trade prices as aged stock is disposed of and these cheaper prices are also likely to further stimulate consumer demand.

Remainder of the market

Interest rates are continuing to limit retail consumer demand due to the cost of borrowing, this time last month used car customers were increasingly tending to be cash buyers, having secured cheaper funding outside of the retail network, but some of the least competitive APR deals have now improved slightly. Those dealers who are offering deposit contributions, combined with relatively low APR rates, are seeing the benefit and we expect this trend to continue. Interest rates are also having an impact on dealer profitability due to increased holding costs and many are expected to continue to run at stock levels considerably lower than they would have been historically, with vehicle values also remaining higher. With base rates expected to stay level again this month, the situation is certainly not expected to deteriorate in the near future. Although in general we are not expecting car supermarkets and the bigger groups to be out buying large volumes of stock in December, some may be tempted by current pricing levels and with one eye on their requirements for new year sales.

We expect the re-pricing of aged stock to continue and growth in demand to be limited by the cost-of-living squeeze. Increasingly, we expect dealers to be disposing of overage cars, either through auction or within the trade, as they cut their losses and focus on current market opportunities. It is currently very difficult to determine where the market will be in 12 months' time, due to the increases in used car volume being delayed to such an extent that they start to merge into the period of reduced supply from lower new car registrations through the pandemic – we are now three and a half years on from the first UK impacts of Covid-19.

There are ongoing constraints all across the supply chain and global supply chains remain fragile. Semi-conductor supply remains constrained, but availability for all manufacturers has improved significantly and is expected to result in continued improved new car registration performance through the remainder of 2023. Longer term concerns regarding security of water and power supplies in Taiwan, plus the potential for invasion by China, result in an outlook where chips in general remain in relatively short supply until additional manufacturing capacity comes on stream. Further supply disruption seems inevitable and the timing of that disruption and location of the countries impacted is likely to be impossible to predict, but the level of disruption is expected to be less than seen over the past two to three years.



Prices have continued to soften for many of the elements which had been driving inflation, including fuel, gas and electricity (although we have seen slight increases in all three in recent weeks, mainly as a result of events in the Middle East) and it is hoped that lower year on year prices will continue to feed through into food prices over the coming months; CPI is expected to continue to reduce from the peak. Container prices and shipping costs remain well below their previous highs, but the global inflation outlook remains complex and recent oil price increases have slowed reductions in inflation across the globe. Increases in base rates from central banks, including the Bank of England, are thought to be unlikely to have any significant impact on inflation and appear to have potential to limit growth. We expect continued reductions in inflation in the coming months to be a (direct or indirect) result of lower fuel and energy costs – despite increases in the past month, petrol and diesel prices in the UK remain significantly below where they were last year.

In summary, our view is that:

- Numerous battery electric models have now stabilised following very large decreases in used values in recent
 months, whereas a small number remain very weak and appear to still have some way to fall, with no common
 denominator or central theme governing how individual ranges are performing. Many models are now looking
 excellent value compared to ICE equivalents or competitors and although there is potential for some to increase
 from their current used value position, we have generally assumed that we will see further deflation in future and
 have applied negative editorial or future trends adjustments in most cases. There are small positive adjustments
 for the handful of models which have seen the heaviest falls.
- The used car market in December is expected to continue to perform worse than typical seasonal movements, but prices are not expected to fall as far as they did in October and November. Condition continues to be key, with parts availability and refurb capacity continuing to reduce and the cleanest vehicles are generally expected to continue to perform well. Retail demand will remain constrained over the short term as the reality of the cost-of-living squeeze continues to make itself felt and concerns remain over the impact of current interest rates on mortgage costs. Used car volumes will start to reduce in the coming months, as long overdue vehicles start to disappear from fleet order banks. For most sectors, our short-term forecasts show negative movements for the next three months, still unfavourable to typical seasonality, although dealers are expected to continue paying good money for the best condition cars and for those at an attractive price point for a quick retail sale. Battery electric models are all still frequently re-assessed on an individual basis for short term forecast, but some are now allocated standard sector movements.
- As mentioned in our customer webinars, the negative economic impact of any potential recession is expected to be
 outweighed by the reduction in used car supply already guaranteed by the lower new car registrations from the
 start of the pandemic onwards. Used car prices are not generally correlated with GDP growth, partly because there
 is a substantial element of core "needs purchases" and also because reductions in consumer confidence and
 disposable income result in changes of used car buying, rather than preventing it; buyers may turn to
 older/smaller/higher mileage cars or turn to the used market instead of buying new.
- Although increased new and used car activity is expected to increase in January, there is limited scope for any
 improvement in used values. We expect a significant amount of forced registration activity at the end of 2023,
 complicated by the contrasting considerations of 2023 CAFE fines and the forthcoming Zero Emission Vehicle
 Mandate from 1st January 2024. Many of these vehicles will undoubtedly find their way into the used market in
 early 2024 and we are likely to be into March before we start to see a much more benign used market.
- There are still a significant number of cases where logical relationships have been broken and an increasingly
 smaller number of cases where nearly new used values are above list prices. These are expected to resolve
 themselves in time, but not before further distortion from the latest used value reductions. It is extremely hard to
 predict how retail demand will progress into 2024, especially given the complex economic situation, but in general
 an improvement is expected as CPI inflation continues to decrease and is likely to accelerate once interest rates
 start to come down again.
- New car supply issues have eased significantly for the vast majority of OEMs, but there remain an isolated number
 of cases of derivative-specific impacts within model ranges, or individual options which continue to be difficult to
 obtain.



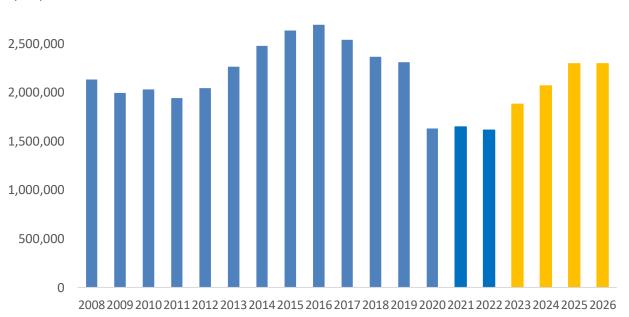
By cap hpi

 As we move into 2024, we will start to see the positive impact of reduced used car supply as a result of more than 2.45 million fewer cars registered through the course of the pandemic, particularly from fleets (approximately two thirds of the shortfall).

Supply side factors

Our original forecast for 2022 was an improvement to just under 1.9mm. Following the disruption of the key month of 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, but -22% vs. 2019), and following further unforeseen disruption, our final forecast for 2022 was reduced to 1.63mm in July, -1.2% down on 2021. The SMMT forecast reduced to 1.60mm in August and was then further reduced to 1.566mm in November. The final new car registration result for 2022 was just over 1.614mm.

Our forecast for 2023 increased in the first half of the year from 1.856mm to 1.880mm (up +16.5% vs. 2022, but still - 18.7% down on 2019). We expect that registrations will gradually increase to a pre-pandemic level of just under 2.3 million registrations by 2025 (a year later than previously expected), but not returning to the peaks seen between 2014 and 2018 and still just below pre-pandemic levels.



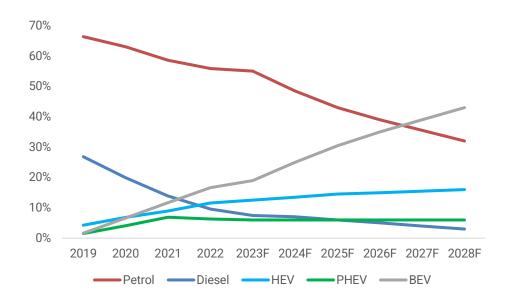
3,000,000

The chart below shows our latest 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. The timing of the eventual disappearance of diesel from the new car market will depend on when manufacturers cease to make individual models available to the UK market.

Our share split progression is also currently under review, with the main consideration being whether the BEV share needs to be reduced slightly based on the current year's registration data, although the likelihood of forced registrations of BEVs this year is going to vary by OEM, with electric-only brands likely to maximise volume and others delaying BEVs until 2024 due to the ZEV mandate.







Growth will continue to be led by battery electric vehicles (BEVs) which became the dominant AFV type towards the end of 2022 as we expected and is forecast to be the largest fuel type in the market by the end of 2027. Post-Covid driving patterns (shorter and fewer 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 2035 will also be part of this increase, provided enough vehicle supply is made available and investment in charging infrastructure keeps pace with demand. BEV penetration is slightly lower this year than previously assumed (but above YTD share due to registration activity in December) and the higher than originally assumed in 2024 due to the introduction of the ZEV Mandate.

Demand side factors

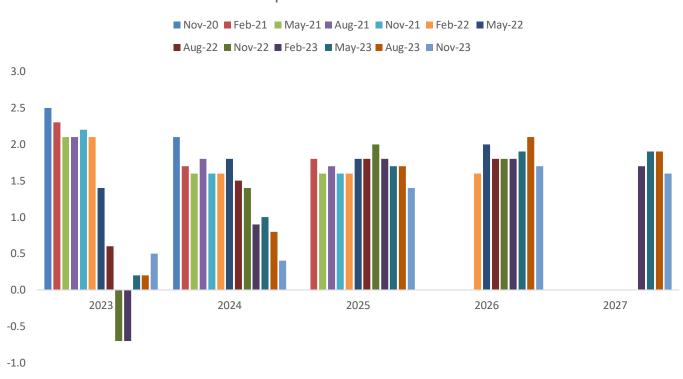
Latest medium-term independent forecasts for the UK economy were published this month and the new forecasts saw an upgrade in the outlook for GDP for 2023 (from +0.2% to +0.5%). There was a further worsening for the view of 2024 (from +0.8% to +0.4%), and further downgrades for 2025, 2026 and 2027 (changes of -0.3%, -0.4% and -0.3% respectively). The recent forecast published by the OBR is worse than the previous outlook but favourable in comparison to the independent forecasts.

The worsening economic forecasts reflect the damage done by successive interest rate rises from the Bank of England and are likely to contribute to base rates remaining at their current level in the short term, before slowly reducing. The average independent forecast for the next 12 months is for interest rates to reduce from the current level of 5.25% down to 4.7% and then down to 3.86% by the end of 2025.





The chart below shows the latest GDP forecasts to 2027, alongside previous forecasts.



Independent GDP Forecasts

There has been a significant shift in views on the future employment situation. The latest independent unemployment forecasts now show unemployment rates increasing throughout the period to 4.8% in 2027 – the May forecasts had been reasonably flat for the next few years and peaking at 4.2% in 2024.

Despite CPI inflation resuming the downward trend, reducing this month from +6.7% to +4.6% (and from a peak of +11.1%), the BoE do not expect it to come back below target until 2025. The previous increases were driven by a combination of increased fuel and energy costs, everyday household goods, food and clothing, and ongoing labour market imbalances. Thankfully, base rates are expected to remain level again in the coming months and although indications from the BoE may imply we are now at the peak, they have been at pains to point out that they will come down slower than they went up. Concerns remain that rates have been raised too far and too fast, damaging UK growth, but it is clear that the central bank are currently in no mood to lower rates in the short term. Although the Bank of England's retain concerns around ongoing wage settlements and service costs fuelling further inflation, the dangers of secondary effects that are harmful to growth going forward also now appear to have been recognised.

The Bank of England survey had previously shown a continued trend for precautionary saving, but they are now factoring in lower level of household saving than had previously been assumed, with amounts built up during the pandemic assumed to now be being spent to fend off the cost-of-living situation.

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.



By cap hpi

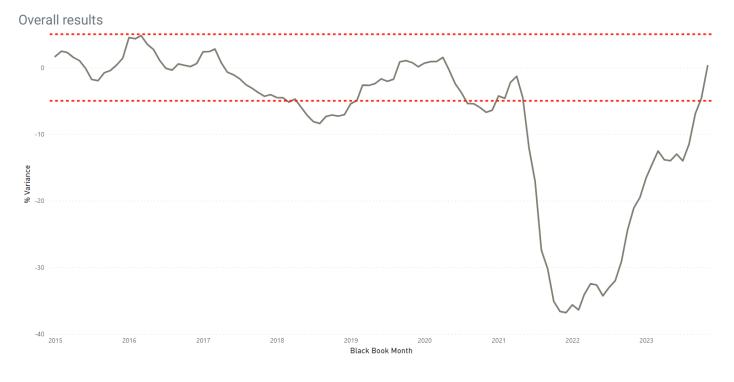
There was a brief deterioration in accuracy in 2020 when business resumed after the first lockdown and values benefitted from the release of pent-up demand, but we were back on target as the market readjusted. In 2021, our historic forecast accuracy was severely impacted by the strength of the used market 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 12-month forecasts (reforecast most recently); and being more for longer term forecasts (reforecast less recently).

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

12-month results

Since measurement began our 12-month forecasts have averaged -7.6% less than used values across all vehicle ids, and the most recent results show November 2022 12/20 forecasts being -0.3% less than November 2023 12/20 used values (the considerable reduction in accuracy in 2022 was as a result of record breaking used value increases of over +30% within six months in 2021).





Car future editorial



SCLERA | cap hpi

By cap hpi

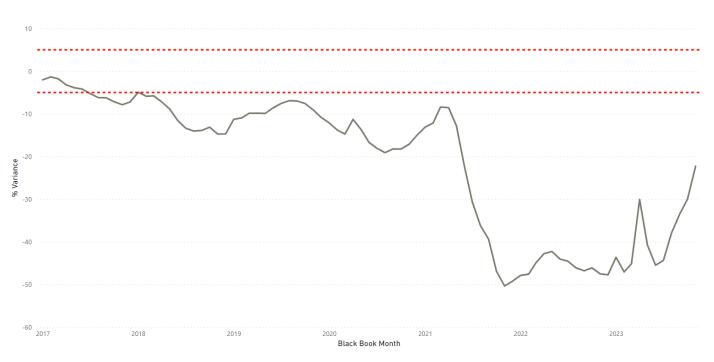
The most recent results for the main sectors are as follows:

November 23	Average of Diff (%)		
City Car	-10.4%		
Executive	-2.3%		
Lower Medium	+3.0%		
MPV	-13.6%		
Supermini	+0.3%		
SUV	+0.1%		
Upper Medium	+4.3%		
Grand Total	-0.3%		

36-month results

Since measurement started our 36-month forecasts have averaged -21.5% less than used values across all vehicle ids (with the average skewed by recent results). The most recent results show November 2020 36/60 forecasts being - 22.3% less than November 2023 36/60 used values. Since used value increases peaked at around +40% early in 2022 and values are not expected to fall by anywhere near that (peak YOY deflation now expected to be around -5%), the historic three-year forecasts will continue to track well below used values for a long time to come. The apparent spike in April 2023 is a reporting error which we are unable to correct retrospectively.

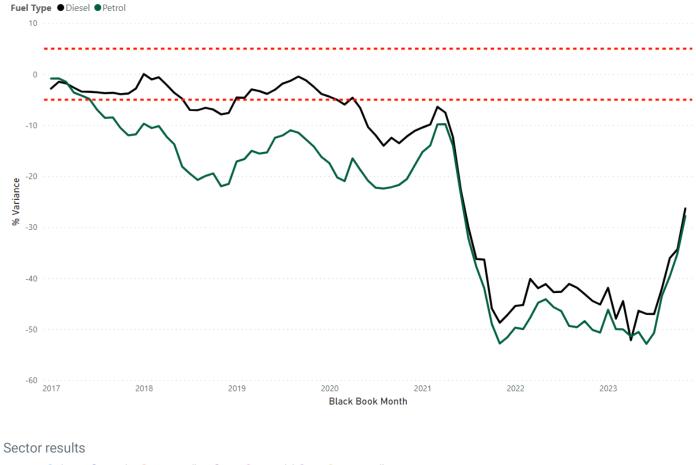
Overall results:



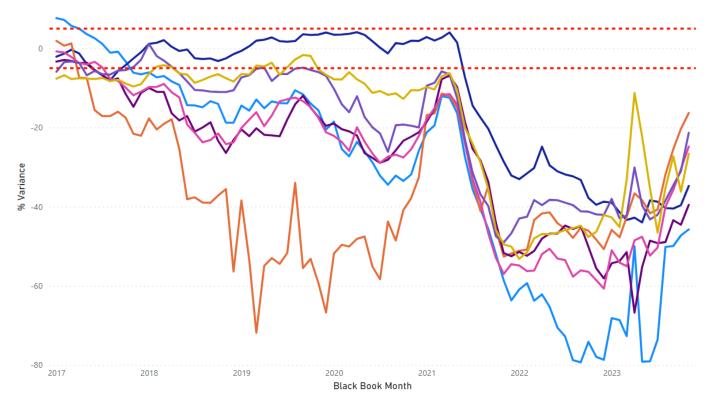


By cap hpi

Fuel type results:



Sector ● City Car ● Executive ● Lower Medium ● MPV ● Supermini ● SUV ● Upper Medium





By can hni

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

November 23	Average of Diff (%)	
City Car	-45.7%	
Executive	-34.8%	
Lower Medium	-16.3%	
MPV	-39.5%	
Supermini	-24.8%	
SUV	-21.3%	
Upper Medium	-26.7%	
Grand Total	-22.3%	

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.

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 2024

The table below shows our future schedule of sector reforecasts:

Monthly Product	Sector 1	Sector 2	Sector 3	Sector 4
Jan-24	Lower Medium	MPV		
Feb-24	Convertible	Sports	Supercar	
Mar-24	SUV			
Apr-24	City Car	Supermini		
May-24	Upper Medium	Executive	Large Executive	Luxury Executive
Jun-24	Lower Medium	MPV		
Jul-24	Convertible	Sports	Supercar	
Aug-24	SUV			
Sep-24	City car	Supermini		
Oct-24	Upper Medium	Executive	Large Executive	Luxury Executive
Nov-24	Lower Medium	MPV		
Dec-24	Convertible	Sports	Supercar	



