

April 2020

Future used car market overview

Welcome to the latest version of our overview, previously known as the 'gold book used car editorial'. 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 new format would be appreciated: e-mail andrew.mee@cap-hpi.com

The content is structured as follows:

1. Headlines – **INCLUDING AN IMPORTANT ANNOUNCEMENT ON THE IMPACT OF THE COVID-19 PANDEMIC ON OUR FORECASTING PROCESS**
2. Reforecast details this month
3. Market conditions
4. Historic forecast accuracy
5. Forecast methodology
6. Sector reforecast schedule 2020-2021

1. Headlines - key changes and additions to the overview this month

Forecast changes

This month, we publish new reforecasts for the MPV, Cabriolet, Coupe Cabriolet sectors.

See section 2 for more details.

Market Conditions Changes

IMPORTANT ANNOUNCEMENT

The country is now in lock-down for an unspecified period due to the COVID-19 pandemic. New and used car sales activity has practically ceased, and the long term impact on the UK economy and car market is uncertain. Therefore, we have taken the decision that the sector reforecasts published this month will be the last ones carried out under our normal 5-monthly sector reforecast process, until further notice.

We will, however, still be publishing small changes to forecast values each month, to reflect the usual pattern of monthly seasonality in the UK market. We will also continue to review walk-up relationships within model ranges as usual.

This decision to stop full reforecasts was made because at present we do not know the scale of the impact on new car registrations, or how long that impact might last. Nor do we know the severity of impact on the UK economy, and ultimately on consumer capability and confidence to buy used cars in the future.

Therefore, it would be futile, and wrong, to try to make long-term future market movement assumptions at this time. We will be taking a logical and measured approach by waiting to see how things develop.

As and when the situation becomes clearer, and we are able to properly assess the impact on the future balance of used car supply and demand, then we will re-start our regular reforecasting process. We will keep you fully informed on when this will be, and what assumptions we will be making.

Although we cannot make firm assumptions now, it is worth saying that the current disruption to new car registrations will mean less used supply in the future, and potentially that could be good news for used car values. The impact on the economy and buyer confidence could put some downward pressure on values, especially in the shorter term (say in 1 years' time) but is likely to have less impact in the longer term. On a positive note, the government has taken action to try to protect people's jobs and income during the crisis, so it is to be hoped that any impact on used car demand can be minimised. Our current view is that a full-blown recession can be avoided, providing the current restrictions are lifted within a reasonable time-frame.

It is unlikely that we will be asked to forecast many new models during the current crisis, as we expect most new model launches to be put on hold. However, our New Vehicle Data team will be working as normal and we will publish initial forecasts for any new models if requested to do so, although these may be subject to change once we are able to drive the vehicles.

We will continue to publish monthly future market overviews and update you with our views, opinions, and plans, as these develop.

Other market news:

The Bank of England base rate was cut to 0.1% on 19th March, an all-time low

SMMT figures up to the end of February 2020 show UK new car registrations were down -5.8% against 2019, with diesel down -33.3% to 20.5% market share..

The used car market on the other hand had continued to perform very strongly until the COVID-19 pandemic restrictions started to impact in late March

See section 3 for more details on market conditions; note however this has not yet been updated with our views on the future impact of COVID-19, for the reasons stated above.

Historic Forecast Accuracy Changes

Historic forecast accuracy has improved since the worst position of 2018, as the previously unexpected strength in current market values has been corrected as we predicted. In addition, our sector reforecasts since early 2017 took this strength into account, and this is now flowing into the accuracy results, starting with 1 and 2 year forecasts.

See section 4 for more details on accuracy.

2. Reforecast details this month

This month, we publish our new reforecasts for the MPV, Convertible, and Coupe Cabriolet sectors.

For all of these sectors, we have not changed our future market deflation assumptions, so the forecasts all reflect the changes in current market values since the previous reforecast five months ago, and an element of further model aging into lifecycle.

Current market values have been strong over most of the preceding 5 months, up to a fall towards the end of March; so the reforecast movements have been relatively small across all these sectors.

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 black book movements.

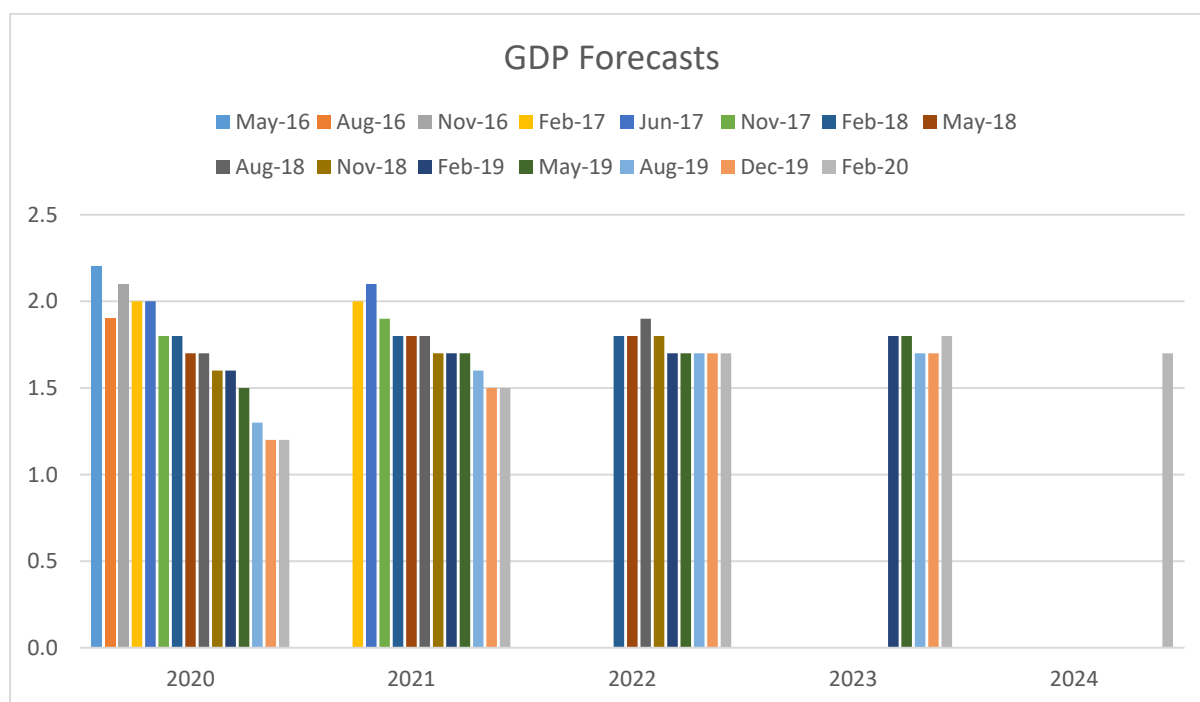
3. Market Conditions

The economy

We left the EU on the 31st of January and are now in the transition period to agree new trading agreements. This is expected to be concluded by the end of 2020, but it may be extended. The transition period means that there is likely to be little or no significant Brexit impact on the UK car market during 2020.

New independent economic forecasts were published by HM Treasury on 19th February and remain positive.

GDP is forecast to slowly increase in future years.



These forecasts are consistent with the recent history of GDP growth, and with the trend in quarterly growth since 2016, with the UK economy continuing a trajectory of consistent but sluggish growth.

Not all ages and sectors of vehicle are directly impacted by GDP, but for those that are then in some cases lower future registration volumes will offset reduced GDP.

CPI is currently running at 1.7% (March 2020); and the average of the latest independent forecasts (February 2020) are for it to remain around 2% over the next 5 years.

Unemployment is still currently running at a 45 year low of 3.9% (March 2020); and the average of the latest independent forecasts (February 2020) are for it to remain under 4% over the next 5 years.

Interest rates are expected to remain low, with the latest independent forecasts (February 2020) predicting a modest rise from 0.75% today to 1.55% by 2024.

Wage growth reduced slightly during the second half of 2019 after reaching an 11 year high, but remains above inflation. With unemployment continuing to fall, these conditions should continue to provide a positive impetus to the overall economy.

Oil prices are seeing medium term volatility due to a number of global concerns. The various trade tensions have undoubtedly had an impact and we are now faced with the additional issues of an impeachment trial in the US and the potential spread of Coronavirus, which could have significant effects on both the Chinese economy and global travel. We expect to see a continuation of short-term peaks and troughs for the near future, which obviously hampers strategic planning for many businesses.

Forecasts for future house price increases vary dramatically by sector and especially by geography. The uncertainty that followed the EU Referendum was followed by a period of stability in the lead up to the General Election and UK house prices rose over the last month at the fastest rate on record for the time of the year, with an accompanying increase in the volume of properties sold of +7.5% year over year. The longer term outlook is for sustainable growth, albeit clearly at a more modest rate than seen at present.

Supply outlook

Exchange rates are a major influence on the profitability of the UK new car market and they strongly influence eventual used vehicle volumes. Sterling rates against the Euro reduced from around 1.43 in late 2015 to around 1.14 by late 2017, where they have broadly remained. This has limited manufacturers' scope for heavy discounting and forced registration activity in the UK. The rate has improved to closer to 1.20 since the Election, but it remains to be seen whether this is a short-term reaction or longer-term change, which may improve UK profitability for car manufacturers.

New car registrations in other key European markets continue to grow, with the ACEA reporting provisional figures of a 1.2% increase in 2019 across the EU to more than 15.3 million units. Excluding the UK, there were increases in the largest markets apart from Spain (-4.8% but improving through the second half of the year). Almost all markets have seen a decrease in diesel cars, with alternative fuels increasing, but with petrol substituting for the vast majority of the lost diesel share. The expected effects on vehicle supply is that diesel lead times will decrease or remain stable, while electric vehicle volume may well be diverted to markets other than the UK.

Mainly as a result of the exchange rate position, UK new car registrations have fallen since 2016:

2016: 2.69M

2017: 2.54M (-5.7% reduction)

2018: 2.37M (-6.8% reduction)

2019: 2.31M (-2.4% reduction)

Diesel registrations have seen the heaviest fall, with market share down to 25.2% in 2019, compared to around 50% at its peak only a few years ago.

Looking to the next few years, and subject to the final outcome of Brexit, we expect the total UK market to stabilise, and then possible start to grow slowly if GDP forecasts materialise and exchange rates remain relatively stable.

The shift out of diesel will continue, but the rate of decline will slow down as we reach the hard core of drivers for whom diesel makes sense, and there could be return to diesel from some drivers who switched to petrol but have not liked the increase in fuel costs. Petrol will remain the dominant fuel type, with an increasing proportion including mild hybrid technology to reduce CO2 and improve consumption.

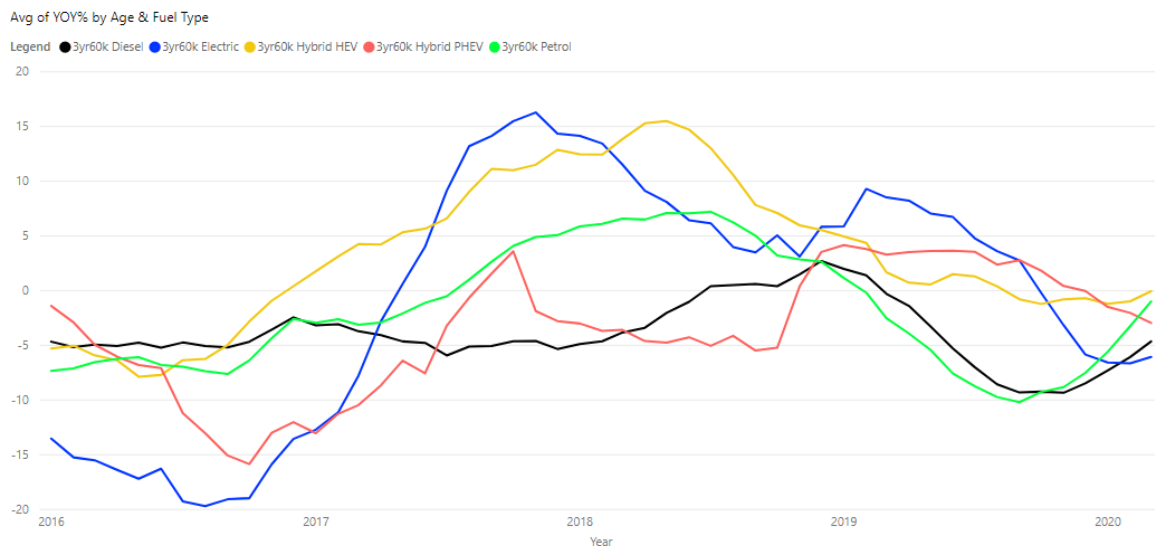
There should be increased take-up of alternative fuelled vehicles but this is very dependent on battery production and supply; and on taxation incentives and charging infrastructure. The new zero BIK rate for Battery EVs in 2020 is welcome, and should boost sales if battery supply can be met.

Demand outlook and impact on future used values

Contrary to the new car market where diesel share has declined sharply since 2016, used diesel values have continued to generally hold up well over the same period (broadly in line with our historic future deflation assumptions) as demand has continued to meet supply. There was a temporary peak in strength in late 2018 when WLTP interrupted new car and part exchange supply, and then a market correction downturn after this.

Petrol and hybrid values were particularly strong (exceeding our historic future deflation assumptions) up to late 2018, as buyers sought an alternative to diesel where available. We always considered this strength to be unsustainable, and in 2019 this proved true with a market correction. There is still some remaining strength in hybrid cars, where volumes remain low.

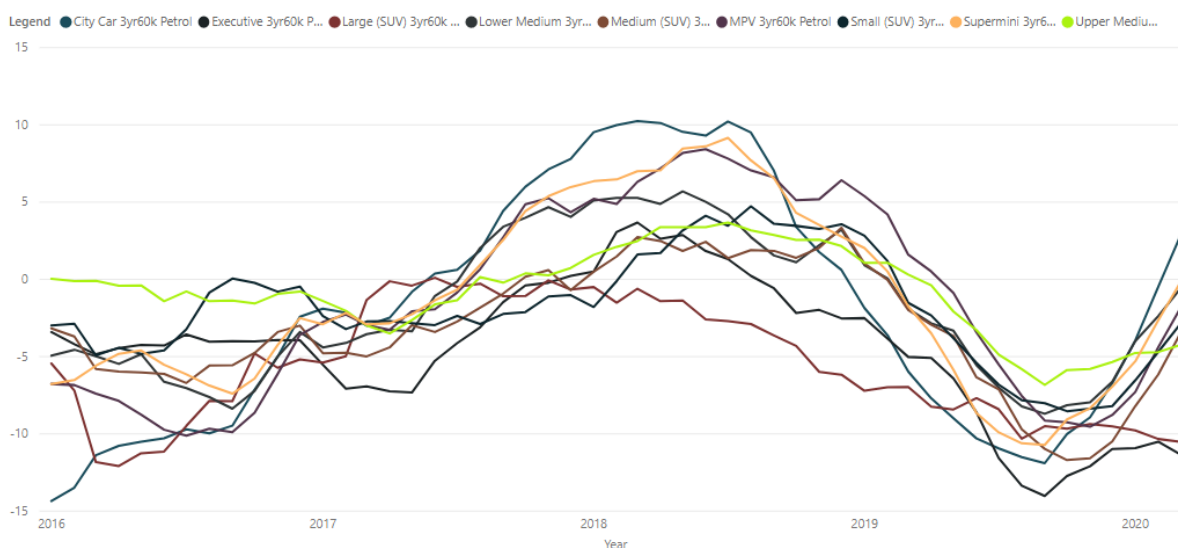
The following chart shows the average year-on-year percentage change in value of the same model (cap id) at 36/60k, split by fuel type.



As we predicted, the worsening of YOY deflation in 2019 has now turned a corner, and as we move through 2020 we expect deflation to continue to improve.

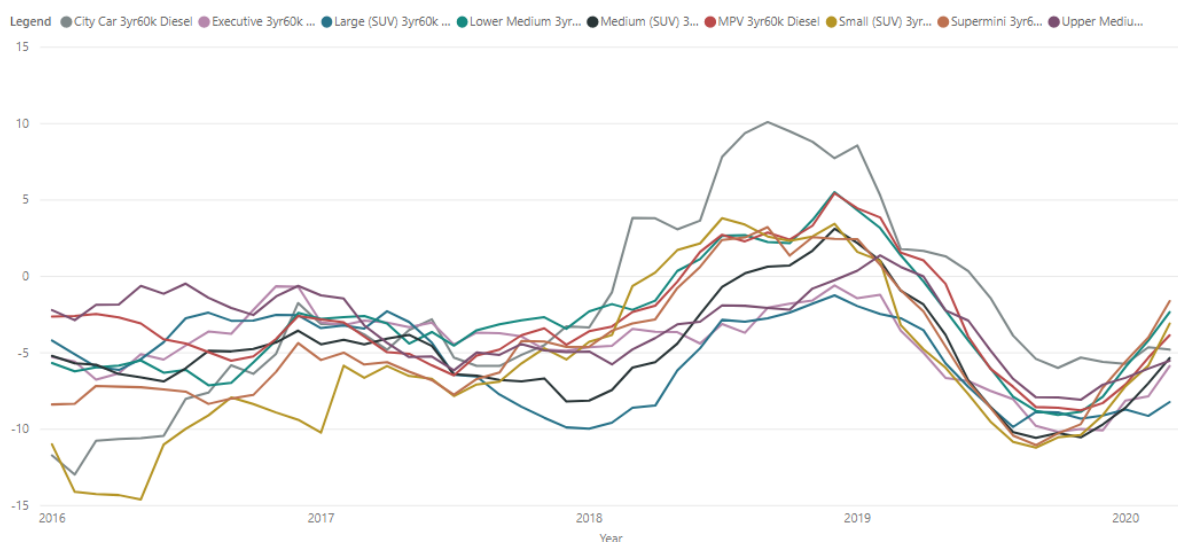
In the main vehicle sectors, petrol values have shown similar YOY trends since 2016, as shown in the following chart:

Avg of YOY% by Sector, Age & Fuel Type



Similarly in the main vehicle sectors, diesel values have also shown similar YOY trends since 2016, as shown in the following chart:

Avg of YOY% by Sector, Age & Fuel Type



Looking to the next few years, we expect the supply/demand equation to re-stabilise across all fuel types, subject to the outcome of Brexit. Our forecast assumptions are for year-on year deflation broadly in the range of -3% to -6% per annum, varying by sector and fuel type.

There will be an increase in supply of used diesel cars coming onto the market until late 2020, as a result higher registration volumes up until 2017. However we expect demand will meet this supply, unless there is widespread implementation of city charging zones for diesel cars in this period, or significant government legislation changes affecting the running costs of diesel cars. We do not consider either of these actions to be likely in that timeframe.

4. 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 have been affected by the unexpected strength of petrol values throughout 2017 and 2018 as a result of anti-diesel press, and then the downturn in values during 2019 which we predicted and which now appears to be at an end.

As a result, our used forecasts have tended to be more accurate on average for shorter terms than longer terms, where the impact of our regular sector reforecasts will take longer to flow into the accuracy results.

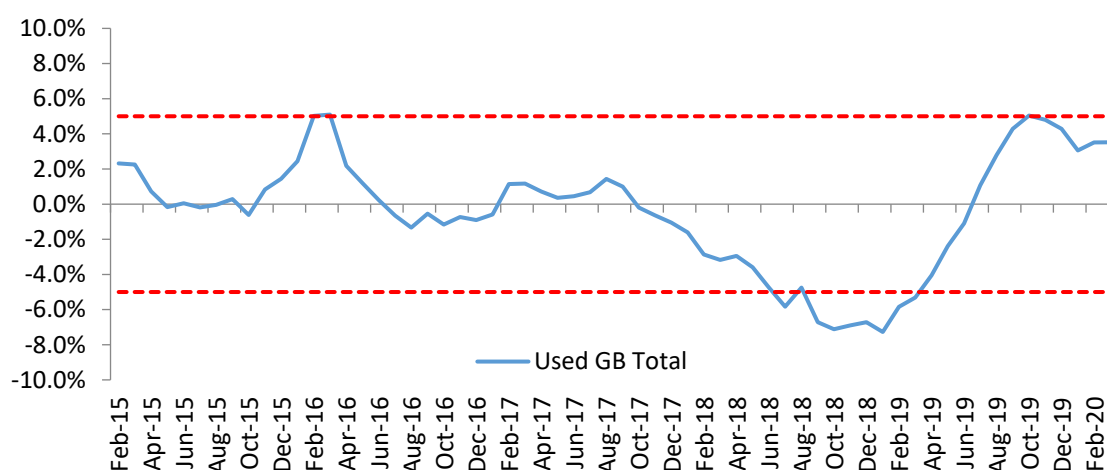
Overall, our used forecasts have proved to be on the high side for diesel, not because of a collapse in diesel values, but with hindsight our historic deflation assumptions were a little optimistic. The deflation assumptions we are using now for diesel are generally more conservative, while recognising that there are, and will be, fewer young diesels in the used market now than before.

At sector level, City Car and Supermini have proved to be the most difficult to forecast, partly because variable manufacturer forced registration activity has impacted used values in an unpredictable way, and partly because of the positive impact on values caused by recent interest in small clean petrol cars.

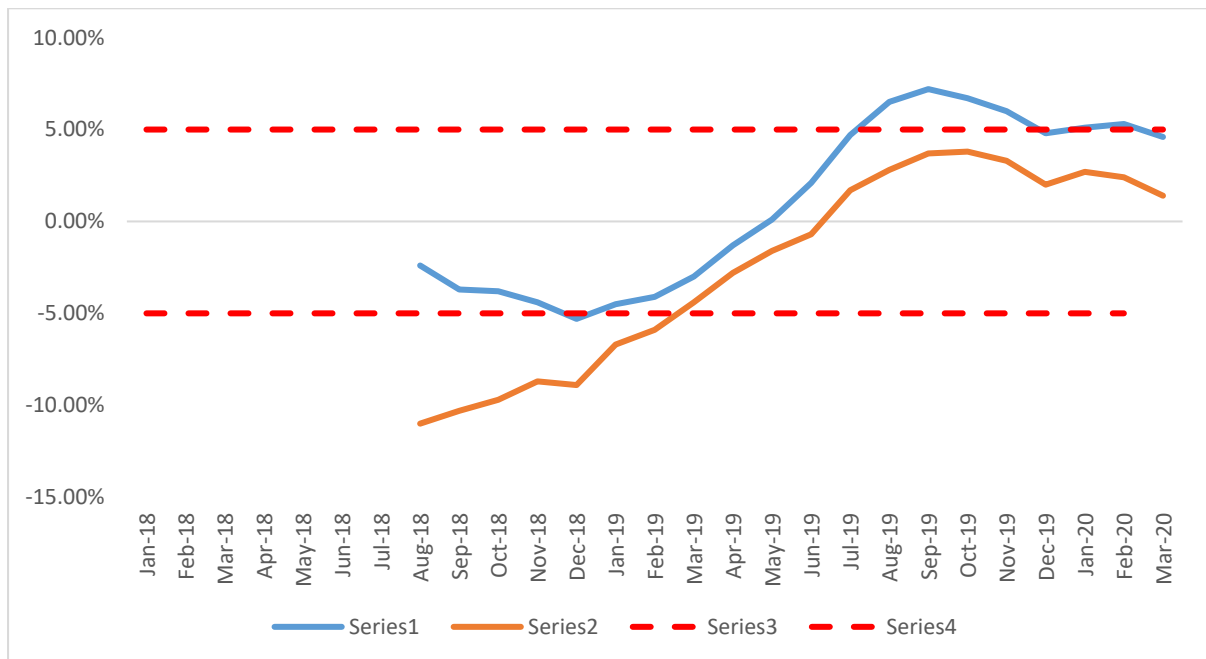
12 month results

Since measurement started our 12 month used forecasts have averaged -0.4% less than black book across all vehicle ids, and the most recent results show March 2019 12/20 gold book forecasts being 2.6% more than March 2020 12/20 black book.

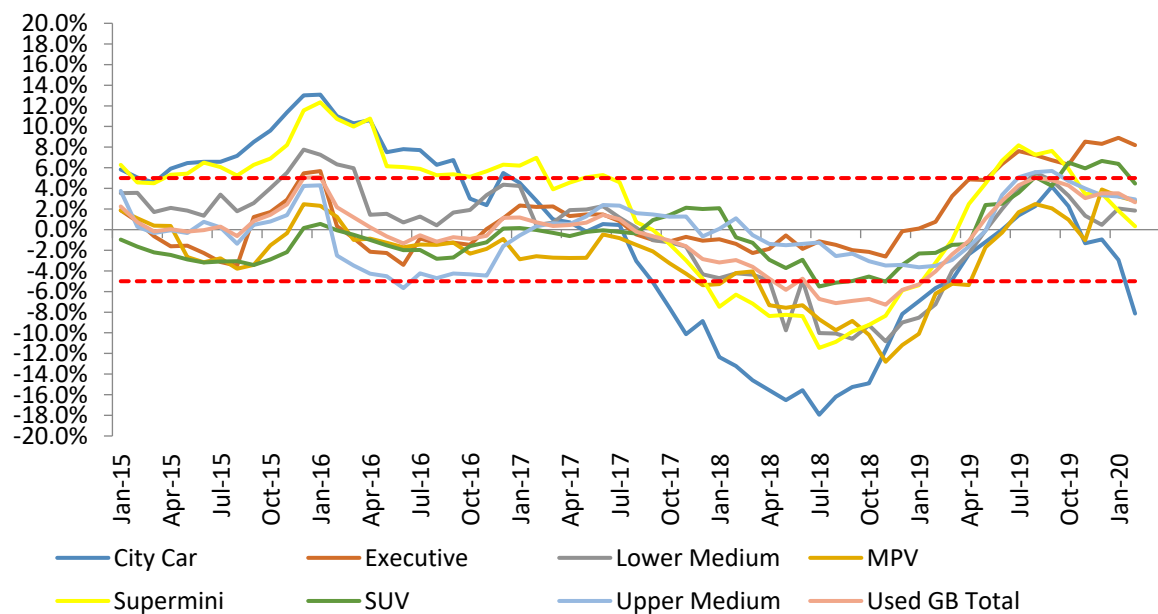
Overall results:



Fuel Type Results:



Sector Results:



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

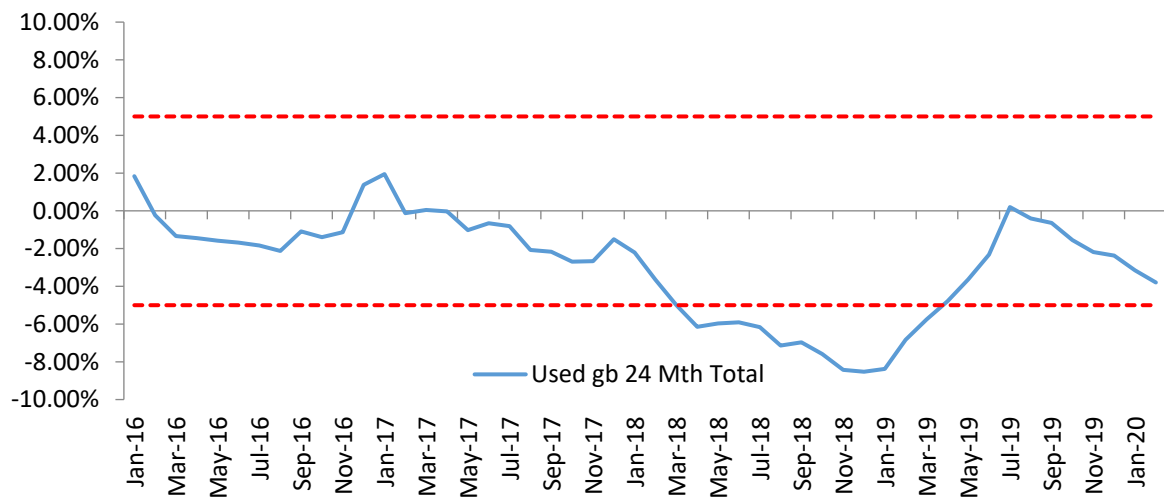
Row Labels	Average of GB Diff (%)
City Car	-8.1%
Executive	8.2%
Lower Medium	1.8%
MPV	2.8%
Supermini	0.3%
SUV	4.5%
Upper Medium	2.9%

Grand Total	2.65%
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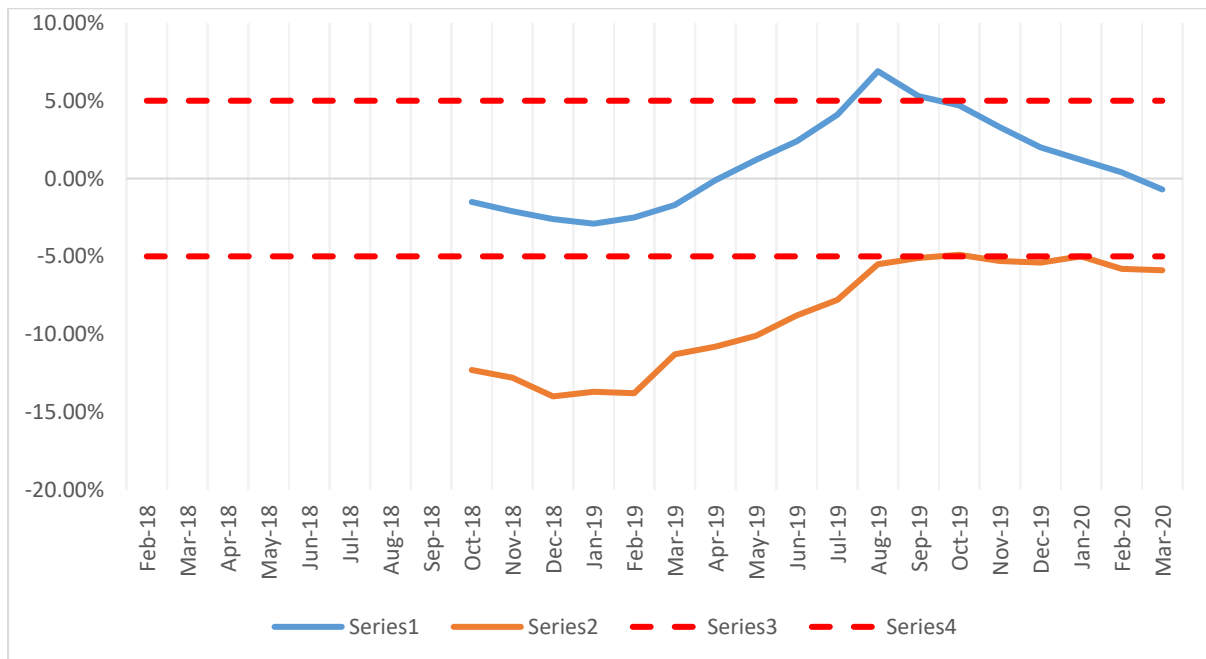
24 month results

Since measurement started our 24 month used forecasts have averaged -2.7% less than black book across all vehicle ids, and the most recent results show March 2018 24/40 gold book forecasts being -3.8% less than March 24/40 black book.

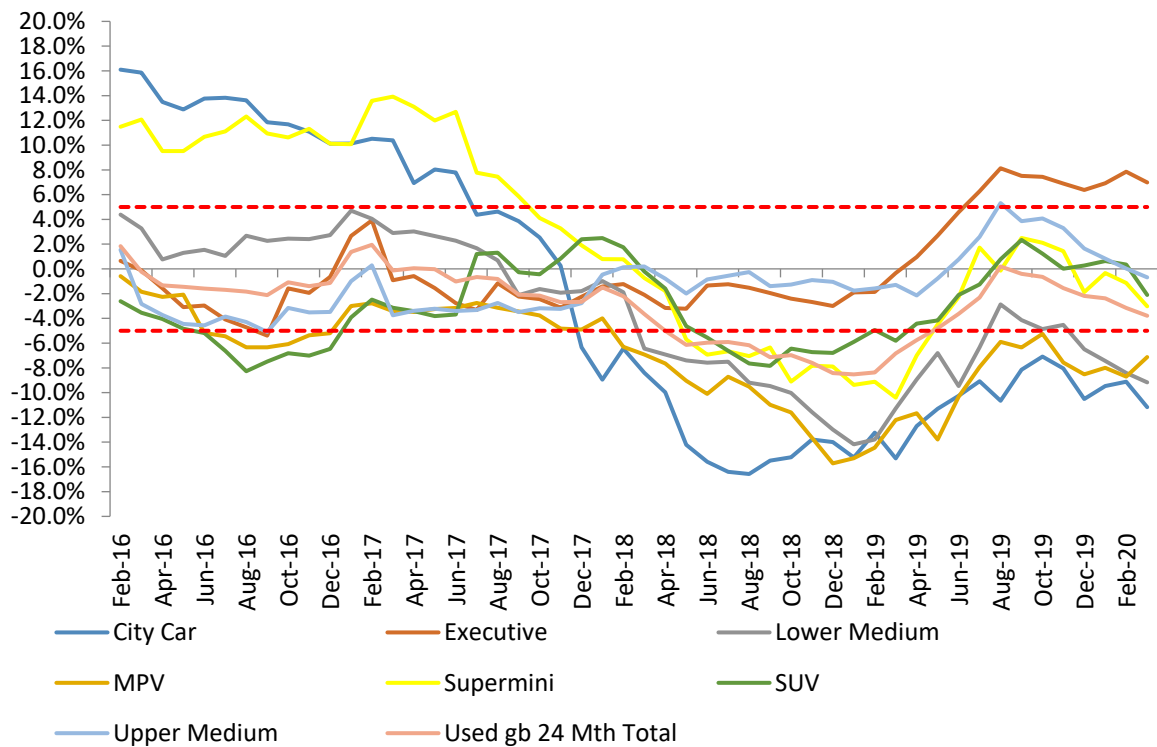
Overall Results:



Fuel Type Results:



Sector Results:



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

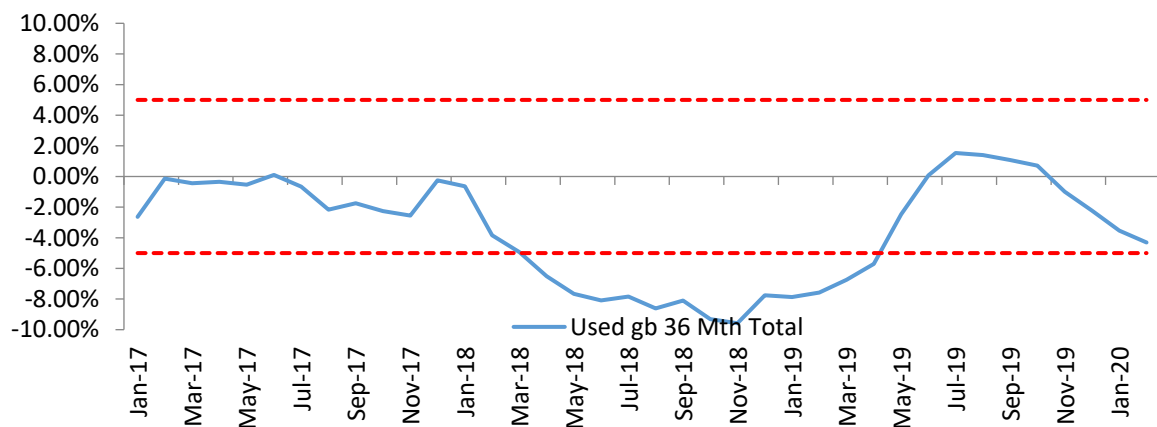
Row Labels	Average of GB Diff (%)
City Car	-13.7%
Executive	7.0%
Lower Medium	-9.2%
MPV	-7.1%
Supermini	-3.2%
SUV	-2.1%
Upper Medium	-0.7%

Grand Total	-3.80%
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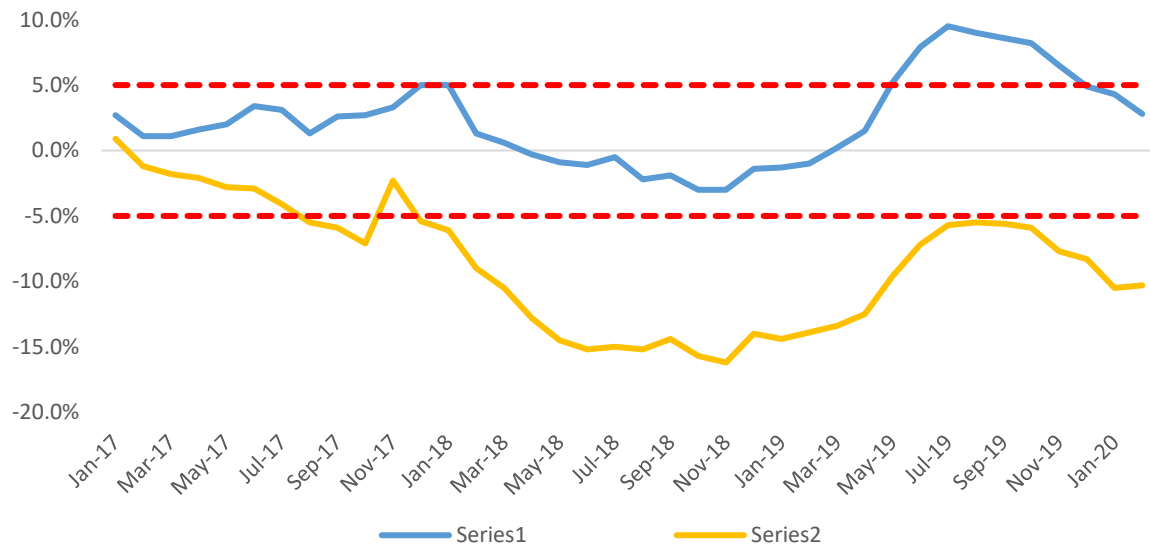
36 month results

Since measurement started our 36 month used forecasts have averaged -3.4% less than black book across all vehicle ids, and the most recent results show March 2017 36/60 gold book forecasts being -4.3% less than March 2020 36/60 black book.

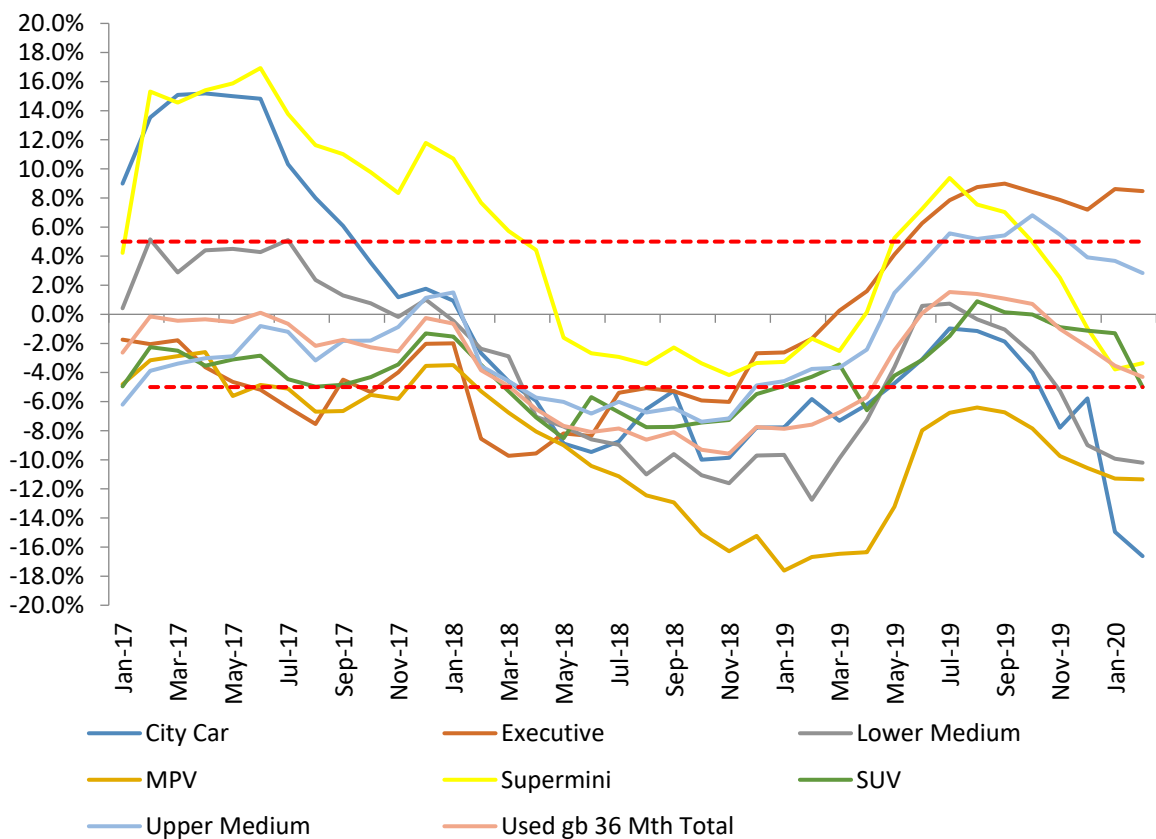
Overall Results:



Fuel Type Results:



Sector Results:



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

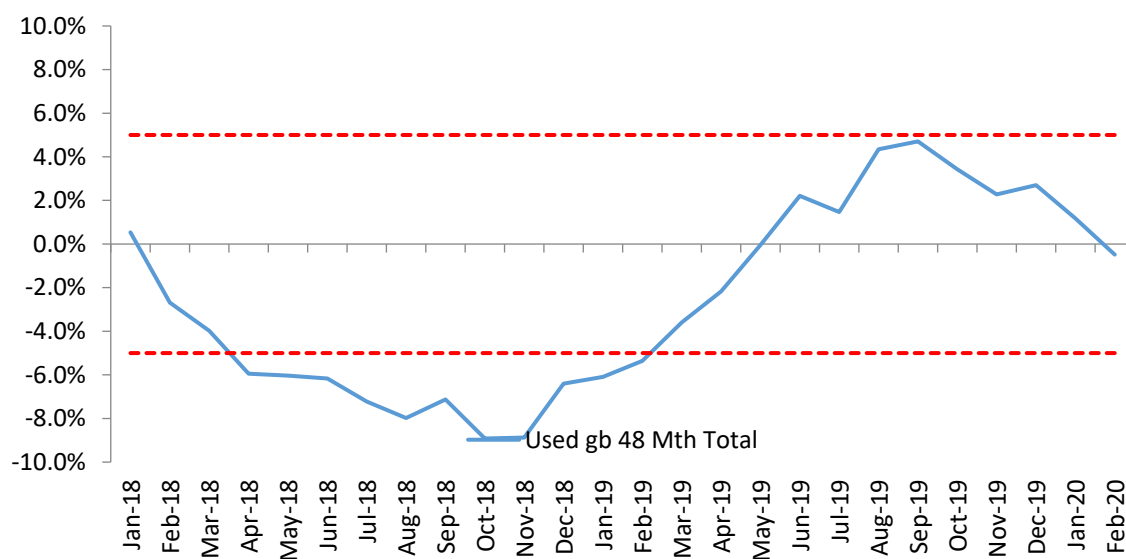
Row Labels	Average of GB Diff (%)
City Car	-16.6%
Executive	8.5%
Lower Medium	-10.2%
MPV	-11.4%
Supermini	-3.4%
SUV	-5.0%
Upper Medium	2.8%

Grand Total	-4.3%
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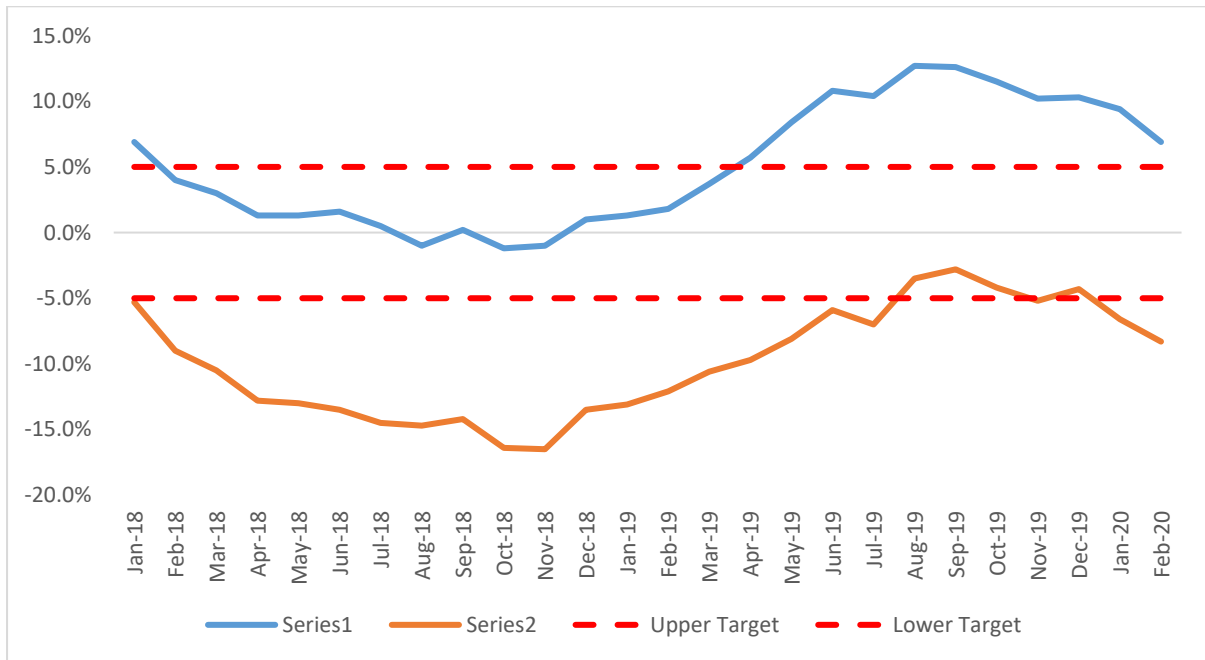
48 month results

Since measurement started our 48 month used forecasts have averaged -2.4% less than black book across all vehicle ids, and the most recent results show March 2016 48/80 gold book forecasts being 0.5% more than March 2020 48/80 black book.

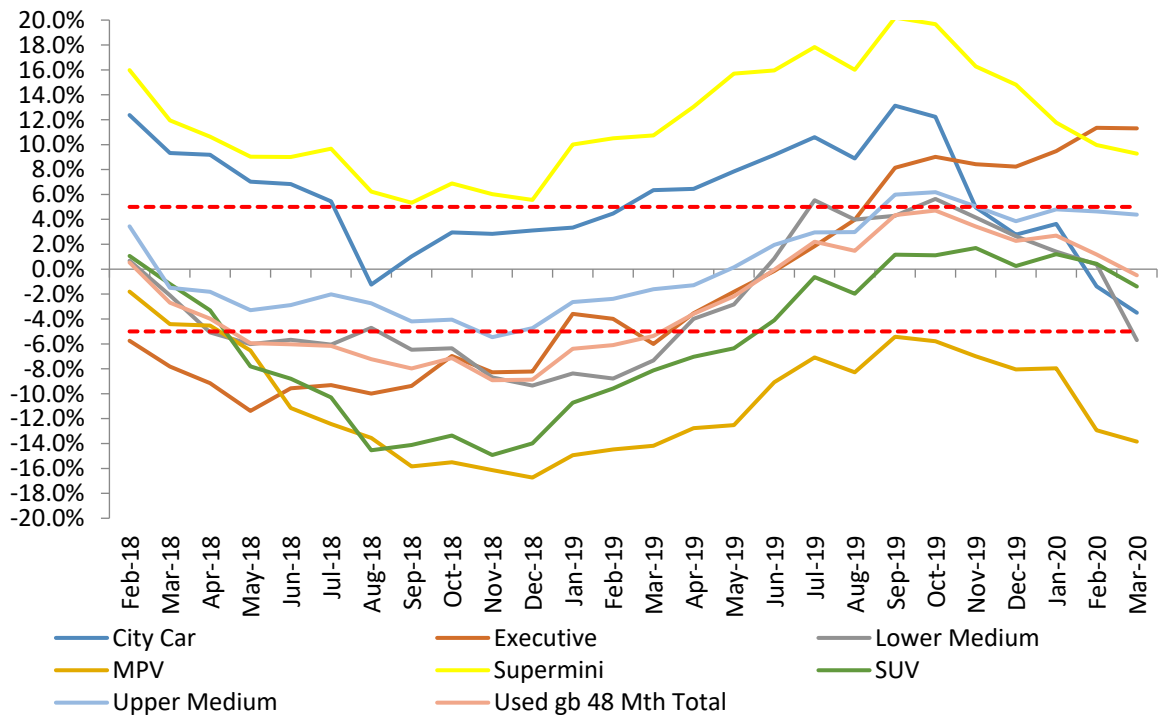
Overall Results:



Fuel Type Results:



Sector Results:



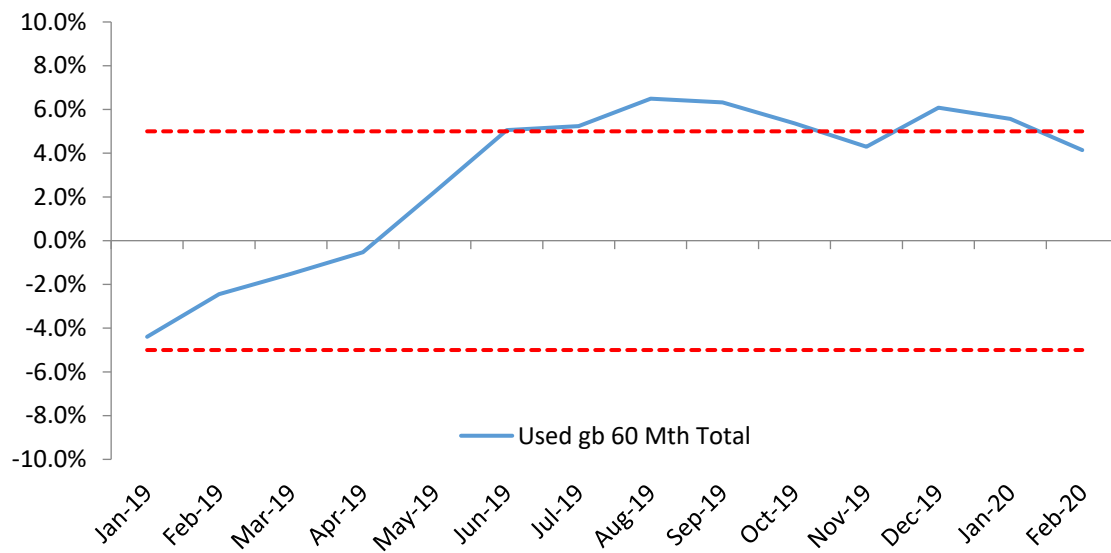
The most recent results for the main sectors are as follows:

Row Labels	Average of GB Diff (%)
City Car	-3.5%
Executive	11.3%
Lower Medium	-5.7%
MPV	-13.8%
Supermini	9.3%
SUV	-1.4%
Upper Medium	4.4%
Grand Total	-0.5%

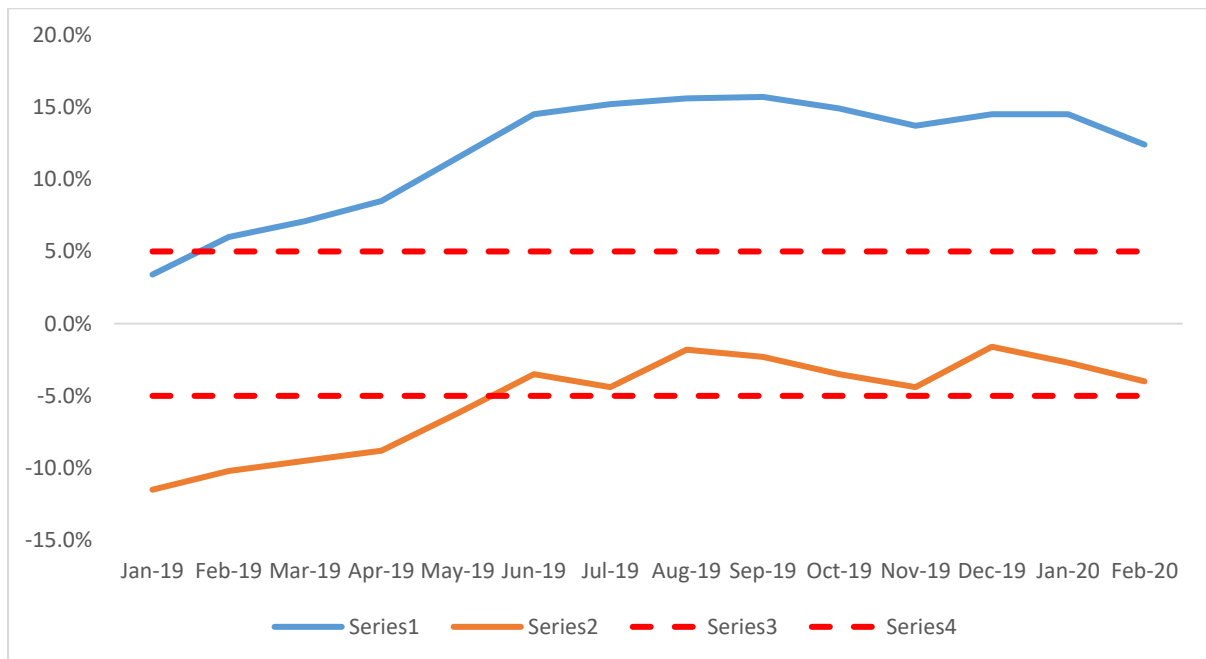
60 month results

Since measurement started our 60 month used forecasts have averaged 2.6% more than black book across all vehicle ids, and the most recent results show March 2015 60/100 gold book forecasts being 4.1% more than March 2020 60/100 black book.

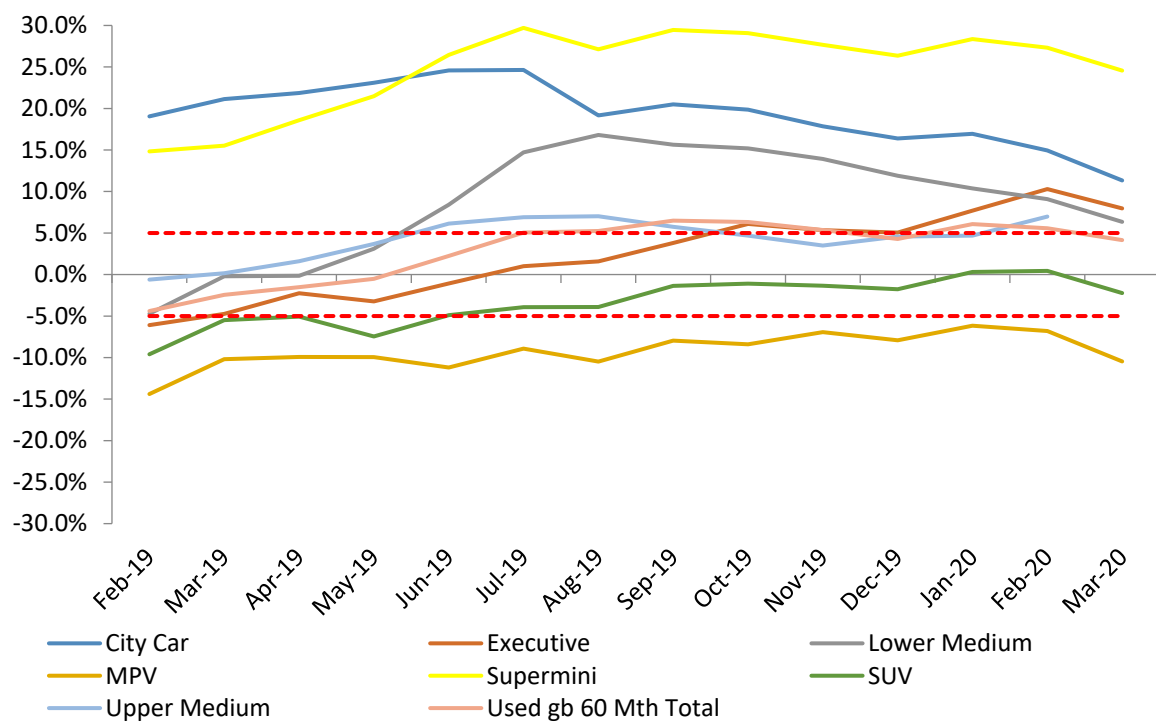
Overall Results:



Fuel Type Results:



Sector Results:



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

Row Labels	Average of GB Diff (%)
City Car	11.3%
Executive	8.0%
Lower Medium	6.3%
MPV	-10.5%
Supermini	24.6%
SUV	-2.2%
Upper Medium	7.0%

Grand Total	4.1%
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5. Gold Book Methodology:

Overview

All of our future residual values are based on the gold book methodology. Our values take current month black book 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 black book movements.

All of these assumptions and adjustments are available for scrutiny to our customers through our gold book iQ product. For years our customers have been asking for transparency in automotive forecasting and we have delivered a ground-breaking product to provide exactly that.

With an increasing number of customers subscribing to gold book iQ, we are entering into a range of debates and discussions around both our overall forecasting methodology and individual elements of the forecasts for particular vehicles. This is expected to evolve over time into a 'virtuous circle', with the feedback looping back into the forecast process and delivering continuous improvement. We are embracing a new era of customer communication, with a greatly improved quality of interaction and debate around our forecast values.

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 black book colleagues exactly as before. This has intensified following the availability of our short term forecast data (gold book 0-12, now available to customers), which incorporates detailed exception reporting at a cap hpi ID level and will also be used increasingly going forward to manage the relationships between black book and gold book.

Forecasting Model Development - gold book & iQ

gold book iQ was launched in December 2013 and gives unparalleled transparent insight into the assumptions used to produce our forecasts.

Our short-term forecast product, gold book 0-12, (also marketed as black book +12) was launched shortly afterwards. This is a live, researched product with a dedicated editor and fills a gap in our previous forecast coverage.

Following feedback on our gold book iQ product, from September 2016 we have added more detail into the commentary for each model range reforecast in sector reviews.

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 gold book 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).

6. Reforecast Calendar 2020-2021:

Monthly Product	Sector 1	Sector 2	Sector 3	Sector 4
May-20	Lower Medium	Sports	Supercar	Luxury Executive
Jun-20	City Car	Supermini		
Jul-20	SUV	Electric		
Aug-20	Upper Medium	Executive	Large Executive	Luxury Executive
Sep-20	MPV	Convertible	Coupe Cabriolet	
Oct-20	Lower Medium	Sports	Supercar	
Nov-20	City Car	Supermini		Luxury Executive
Dec-20	SUV	Electric		
Jan-21	Upper Medium	Executive	Large Executive	
Feb-21	MPV	Convertible	Coupe Cabriolet	Luxury Executive
Mar-21	Lower Medium	Sports	Supercar	
Apr-21	City Car	Supermini		