



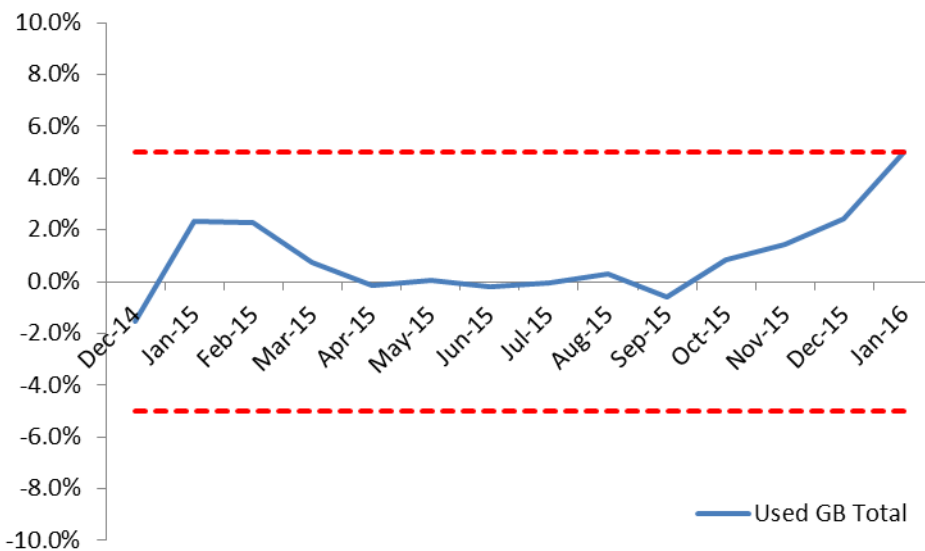
February 2016

This is the CAP guide to future residual values for used cars. Individual forecasts are provided in pounds for periods of up to five years with variable mileage calculations differentiated by sector & fuel type.

ALL FUTURE RESIDUAL VALUES INCLUDE VAT AND RELATE TO A CAP CLEAN CONDITION AND IN A DESIRABLE COLOUR

## Gold Book Forecast Accuracy

As Gold Book is now over a year old, we have the data to enable us to measure our results in terms of forecast accuracy. Overall, our average difference between December 2013 12 month Used Gold Book forecasts at benchmark mileage and equivalent December 2014 Black Book values was a **median of -1.2%** (equivalent to within -£75). That is to say that Black Book values were slightly higher in 2014 than we had predicted back in 2013. This level of accuracy has been maintained through to January 2016, with an **average difference of +5.0%**. Although this is at the limit of our customer expectation, it is skewed by larger % deviation for vehicles which are of lower pound note value and our average accuracy in financial terms is within +£159. We have been taking advantage of our new methodology to implement a 'virtuous feedback loop', with each element of the forecast examined to determine how best to further improve the accuracy of our future value forecasts, while also reducing variation. The accuracy target widely demanded by our customers is to be within 5% of actual values and Gold Book Used Car has been consistently within these limits at the 12 month point:



We will continue to monitor progress in the coming months.

Most recent results by sector are displayed below:

## Gold Book Used Car



Row Labels	Average of GB Diff (%)
City Car	13.0%
Executive	5.5%
Lower Medium	7.8%
MPV	2.5%
Supermini	11.6%
SUV	0.1%
Upper Medium	4.2%
<b>Grand Total</b>	<b>5.0%</b>

As stated above, it should be noted that although the percentages for City Car and Supermini are larger than for the other sectors and outside of the target, this is principally due to the lower value of the vehicles, especially for older vehicles.

Our initial data at the 24 month point showed a weighted average of -1.9% difference against December 2015 Black Book and this is currently running at 1.9% in January 2016.

## CAP Gold Book Forecasts – February 2016

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 assumptions regarding future used car price movements and are then subjected to additional adjustments by the Editorial Team. All of these assumptions and adjustments are now 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.

Our Gold Book methodology was designed to feature 5 mileage bandings (rather than the 3 bandings which have traditionally been published) and the mileages tabulated in our database are now much more relevant to the age of the individual vehicle and are differentiated by sector and fuel type. Our used forecasts are also now available out for 5 years into the future for all vehicles currently up to 5 years old today. Our Windows, ASCII and SQL products remain technically the same, with the only changes being the methodology behind the forecast data and the selected mileages which are tabulated.

Our short term forecast product, Gold Book 0-12, (also marketed as Black Book +12) has now been launched and is available to customers. This is a live, researched product with a dedicated Editor (Rob Hester) and fills a gap in our previous forecast coverage. See link to a previous podcast:

<http://business.cap.co.uk/cap-extra/join/podcasts/podcast-want-better-way-accurately-value-part-ex>

## Gold Book Used Car



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.

### Reforecast Calendar 2016/17

Monthly Product	Sector 1	Sector 2	Sector 3	Sector 4
Mar-16	Lower Medium	Sports	Supercar	
Apr-16	City Car	Supermini		
May-16	SUV	Electric		
Jun-16	Upper Medium	Executive	Large Executive	Luxury Executive
Jul-16	MPV	Convertible	Coupe Cabriolet	
Aug-16	Lower Medium	Sports	Supercar	
Sep-16	City Car	Supermini		
Oct-16	SUV	Electric		
Nov-16	Upper Medium	Executive	Large Executive	Luxury Executive
Dec-16	MPV	Convertible	Coupe Cabriolet	
Jan-17	Lower Medium	Sports	Supercar	
Feb-17	City Car	Supermini		

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 (0-12 months), which incorporates detailed exception reporting at a CAP ID level and will also be used increasingly going forward to manage the relationship between Black Book and Gold Book.

Next month we will also be publishing our latest forecasts for the various input variables in Gold Book iQ and sector reviews will incorporate these revised values from March product. The underlying regression relationships will be reviewed again later in the year.

### Forecasting Model Development – CAP Gold Book & iQ

Gold Book iQ was launched in December 2013. The feedback from customers to date has been extremely positive and we believe CAP Gold Book iQ will represent a new benchmark in truly market leading forecasting. More details are available here:

<http://business.cap.co.uk/products-and-services/gold-book-iQ>

The answers to some Frequently Asked Questions on Gold Book and iQ are also available on our website:



<http://business.cap.co.uk/gold-book-iq/gold-book-faqs>

During November 2013 we also ran a series of Webinars to further explain Year Over Year % Deflation (YOY%), exactly how it relates to our new forecasting process and some further insights into Gold Book. Recordings are available from the CAP website:

<http://business.cap.co.uk/gold-book-iq/gold-book-deflation-webinars>

## Market Overview

Despite considerable press furore and speculation, no impact has been observed on used values to date and VW diesel models have moved broadly in line with the overall market.

During November, we learned that there were “potential irregularities” with CO<sub>2</sub> (and therefore MPG) data for certain vehicles. Volkswagen have since confirmed that Audi and Seat are no longer impacted and that there are only 9 Volkswagen model/engine combinations which are affected across Europe, 5 of which have not been available in the UK market. We believe that there are now only 19 current CAP IDs which are affected and that the changes in CO<sub>2</sub> data are likely to be much less than originally suggested. Our latest view is therefore that there is likely to be no impact on future values for these vehicles, but it is impossible to know this for certain until we know the full detail. We are still awaiting information on Skoda vehicles, but based on the situation regarding Audi, Seat and VW, we are expecting a similar outcome. At the time of writing, final confirmation is expected within the coming days.

As predicted, we saw something close to a return to normal depreciation patterns for 2014 and 2015, after 2012 and 2013 were characterised by unusually low levels of depreciation due to low levels of supply of used cars. Our research has shown that three and four-year-old prices for many vehicle sectors are closely linked to the level of fleet registrations (+8.0% YOY in 2014 and a further +12.3% in 2015), either overall or for the individual vehicle sector and these will also tend to be driven by business need (rather than the availability of offers which had driven the exceptional new car retail growth in 2013 and early 2014). Fleet registrations have been increasing since falling in 2008/9 and although we predicted a record year for 2015, the final total was bolstered by an extreme level of manufacturer forced registrations, through a variety of means. As previously indicated, there have been a number of model specific adjustments made to Gold Book forecasts, to reflect the detrimental effect of this kind of activity on used values.

As leasing returns increase and more nearly new cars return to the used marketplace, values are broadly expected to decrease in line with previous seasonal aging patterns, with positive impact from the improving economy broadly mitigating the effect of increased supply. The rate of retail growth has slowed considerably (remaining around +2% through Q4 2015), whereas fleet registrations have continued to grow at an increasing rate (overall +12%, although the underlying ‘true’ growth rate appears to have peaked some time ago).

In the coming months, used car supply is expected to increase further, however in general we do not expect to see significant decreases in three or four-year-old values in the next 12 months over and above typical model aging patterns, with supply and demand remaining broadly in balance. Our forecasts incorporate the effect of increased



registrations on individual sectors, with variation in the level of impact and which part of the market the sectors are sensitive to.

Over the next 12 months, the biggest threat to used prices of younger cars is the continued pursuit of forced registrations by manufacturers, chasing the market share levels which were fuelled by lower than expected new car volumes across the Eurozone in recent years. The slowdown in growth in China and collapse of the new car market in Russia could also contribute to pressure for some manufacturers to register more volume in the UK. Although the majority are much more focussed on residual value protection than they were several years ago and tend to manage disposals much more responsibly than in the past, our continued action in the City Car and Supermini sectors reflects the increasing volumes involved. This effect has been far less pronounced to date in most other vehicle sectors, but they may not stay immune from the effects should the forced registration activity continue through 2016.

### Demand Outlook

The outlook for the UK economy remains one of a sustained period of modest growth, with previously bullish Bank of England forecasts now revised down and much closer to the independent average. Making decisions on interest rate changes based on % unemployment is far less reliable than it has been in the past and we are continuing to investigate whether we can usefully integrate any additional labour market metrics into our regression modelling (currently % unemployment is one of 15 labour market metrics studied). Numbers of unemployed and those “economically inactive” continue to decrease at the same time, which is a phenomenon rarely seen in the past. Although the unemployment rate fell to its lowest % rate for more than 10 years (5.1%), wage growth also slowed to its lowest rate over the past 12 months.

On this basis, interest rates are expected to remain low for the medium term. Forward guidance from the Bank of England continues to be inconsistent. At the latest meeting, one member of the MPC continued to support an immediate rate rise, but an initial increase of at least +0.25% now looks likely to be actioned towards the second half of 2016, with some observers even predicting it to be as far out as 2017. Any significant increases in base rates seem unlikely until there is a combination of further improvements in wage growth and increases in rates of headline inflation.

CPI remains marginally positive at +0.2% (from +0.1% in November), with increases in prices for petrol and transport offset by lower prices for food, alcohol and tobacco. Recent reductions in fuel prices look set to now minimise the immediate impact on inflation, but are likely to work themselves out in the near future and provide further positive impact on CPI. Oil prices remain very hard to predict, with the continuing negative news coming out of China pointing towards further price reductions in Brent Crude (due to lower than expected demand) and if sustained for any length of time, these low prices could result in some countries significantly decreasing or even ceasing production. CPI has remained virtually flat for the last year and RPI remains just over 1%. Wage growth remains reasonably healthy, although slower than in recent months, although if earnings continue to outstrip price inflation as expected, then that will continue to provide a positive impetus to the overall economy. However, inflation is expected to increase through 2016, although likely to remain below the 2% level targeted by the Bank Of England.



Having already been deferred on several occasions, the reversal of Quantitative Easing is not expected “for some time” and MPC proposals on increasing the level of QE have been unanimously voted down.

GDP growth for Q4 is widely expected to come in at around +0.4% (+1.8% YOY), lower than expectation, primarily due to reductions in construction output and weakening global demand. However, services continue to grow and annual GDP for 2016 expected to remain positive, in line with the average of the independent forecasts published by HM Treasury (+2.2%).

Consumer and Business Confidence continue to slowly increase as we had expected, with associated increases in overall business investment, particularly in the large corporate sector. Much of the previous export growth was driven by the service sector, but this has slowed in recent months and there have also been increases in manufacturing and domestic car output. Much of this activity reflected the shift in export focus from the Eurozone to emerging economies and this is likely to continue, despite fluctuating Eurozone demand (see below), although exports still remain below the long term average.

Forecasts for future house price increases vary dramatically by sector and especially by geography. Despite a view expressed by the Bank of England’s Financial Stability Committee that the buy to let sector could “amplify” any boom or bust in the housing market, any negative effects are likely to be centred around London, with the rest of the country significantly more insulated from the impact of any such downturn. The ‘new powers’ being proposed are unlikely to have any significant impact as the buy to let market is expected to reduce following previous tax measures announced by the government.

## Supply Outlook

New car registrations for 2015 came in at 2.633 million, with short cycle volumes and forced registrations a significant factor for several manufacturers in the final weeks of the year. We expect the 2016 total to be lower than 2015, but still above 2.5 million. We expect to see continuing impact on 1 year old values in the future and have applied a number of specific model adjustments in Gold Book which have been outlined in Gold Book iQ. If manufacturers continue to pursue market share at the expense of profitability, then the impact on used values will continue to worsen.

Exchange rates are a major influence on the profitability of the UK new car market and they strongly influence eventual used vehicle volumes. The rates for Sterling against the Euro had gradually decreased as we expected, following the short term impact of the announcement regarding the commencement of Quantitative Easing by the ECB and the conclusion of the bail-out discussions in Greece. In recent weeks, rates have reduced as expected from around 1.43 2 months ago, to 1.37 30 days ago and 1.32 today – equivalent to a -9% decrease in Euro revenue for the same vehicle sale. We now expect further modest short term reductions before a more gradual decrease in the Sterling rate against the Euro over the next 3 years, as growth picks up in mainland Europe.

The UK economic situation looks likely to continue to offset the relative weakness in the Eurozone and Sterling has already returned to a level which should limit manufacturers’ scope for heavy discounting in the UK this year.





However, the potential for further turmoil in the Eurozone is significant and the possibility remains that the UK market will continue to look attractive to manufacturers seeking to make up for missing volume elsewhere. The 2015 total for the EU as a whole was up over 2014 (13.7 vs 12.55 million units), but economic improvement is needed to sustain this over the next few years. Although there has been a slight dip in Eurozone growth in December, quarterly growth remains at its strongest for more than four years. Results for 2015 have been encouraging, showing simultaneous growth in the biggest 5 markets for the first time in several years and we could be on the verge of a significant release of pent up demand in 2016 as momentum is finally regained in the major markets. Spain may well slow in 2016 following the removal of scrappage incentives, but the key markets in Germany and France now appear to be growing steadily.

### 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 Gold Book does not include valuations for any grey import vehicles, (i.e. those not available on an official UK price list).

### New Prices

All new car prices in Gold Book include VAT and delivery.