

# THE ECONOMIC IMPACT OF CHANGES TO VEHICLE EXCISE DUTY

A REPORT FOR THE BVRLA

FEBRUARY 2017

## Oxford Economics

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## EXECUTIVE SUMMARY

Each year the rental sector purchases a significant number of cars to maintain the quality of its fleet. In 2016 alone, rental companies in the UK purchased 324,000 new cars. These purchases made up 12 percent of all newly registered cars in 2016, and one-third (104,700) these cars were either wholly or partly manufactured somewhere in the UK. In this way the rental sector plays an important role in supporting automotive jobs throughout the UK and all across its supply chain.

The changes to Vehicle Excise Duty (VED) that are due to be implemented on April 1 2017 threaten to undermine this. The changes markedly increase the amount of duty paid initially, but also remove the ability of car owners to recoup the outstanding portion of VED already paid when a vehicle is sold. This is particularly important for a sector that owns cars for an average of nine months and will mean that all new purchases are subject to a minimum of one year's duty. Altogether, we estimate the average duty paid for cars over nine months of ownership by the rental sector will rise from £36 under the old system to £170 from April, amounting to over £55 million in total (up from £11 million a year earlier).

Faced with such a hike in costs, the sector can be expected to reduce its car purchases, choosing to retain vehicles for longer instead of replacing them with newer models. The impact of this shift in behaviour is substantial: all other things equal, we estimate that 24,800 fewer vehicles will be purchased by the rental sector in 2017 as a result of the changes to VED.

A decline in purchases by the rental sector on this scale could have a significant impact on the automotive sector<sup>1</sup>, and the UK economy as a whole. In 2016, economic impact analysis showed that the purchase of an equivalent number of vehicles (24,800) supported a value added contribution to UK GDP of £84 million. These purchases supported 1,270 jobs and generated tax receipts to the value of £23 million for the Exchequer.

This impact excludes activity, employment and taxes generated in the UK's used car market, but here too a reduction in car purchases by the rental sector will have a knock-on effect. Because the rental sector can be expected to run vehicles for longer in response to the increase in cost, the number of models entering the used market will decline, and so too will the activity, employment and tax receipts that are generated as a result.

There will also be an impact in terms of the efficiency of vehicles on the UK's roads. Vehicles purchased by the rental sector tend to be more efficient than new cars on the UK's roads (116.3g/km compared to 121.4g/km overall in 2015). By reducing vehicle disposals, the VED changes could lead to less efficient vehicles on the UK roads being used for longer, further undermining the government's aims of reducing vehicle emissions.

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<sup>1</sup> Defined as Motor Vehicle Manufacturing, and captured in the Standard Industrial Classifications (SIC) 29 category.

## PLANNED VED CHANGES WILL RAISE AVERAGE PAYMENTS FOR RENTAL SECTOR

On April 1 2017, the UK government will implement planned changes to the structure and rates of Vehicle Excise Duty (VED). This could have a significant impact on the UK's automotive sector, particularly through the rental sector and its position as a key purchaser of cars in the UK.

# £170

*Average nine-month VED to be paid by rental sector after VED changes, up from £36 in 2016*

The change will result in a significant increase in the average duty paid by the rental sector. In addition to increased duty, the new structure does not allow rental companies to recoup VED on vehicles sold within in a year, resulting in companies paying a minimum of a full year's VED on all vehicles purchased. Consequently, the average car duty paid by rental companies over the industry average nine months of ownership will rise from £36 to £170.<sup>2</sup>

Higher duty rates will also be charged after cars are one year old. For each additional year the new average duty paid per car (£148) is nearly seven times greater than under the previous structure (£21). This includes the new £310 per year supplement paid annually (except in the first year) on cars worth over £40,000 that will affect nearly three percent of new cars based on last year's purchases.

## THIS THREATENS TO REDUCE THE SECTOR'S PURCHASE OF UK-MADE VEHICLES

Each year the rental sector purchases a large number of new cars to maintain the quality of its fleet. In 2016 alone, rental companies in the UK purchased 324,000 new cars. Data from the Society of Motor Manufacturers and Traders (SMMT) indicates that nearly 2.7 million cars were registered in 2016; therefore, rental companies were responsible for around one in every eight new registrations.

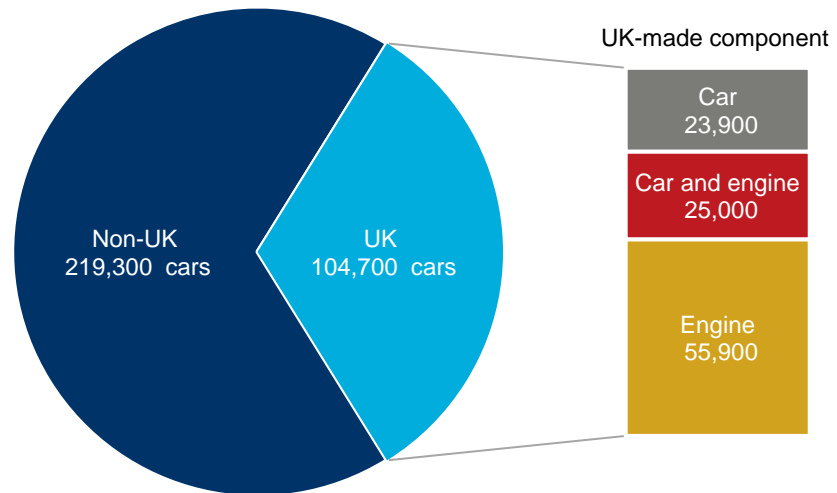
# 104,700

*Nearly one-third of the purchases were manufactured wholly or partly in the UK*

The rental sector has proved to be one of the UK automotive industry's key customers. We estimate around one-third of the cars purchased by the rental sector in 2016 were manufactured either wholly or partly in UK. Of these 104,700 cars, 23 percent were wholly produced in the UK, 24 percent were domestically produced but fitted with imported engines, and 54 percent were foreign-built cars featuring UK-made engines.

<sup>2</sup> This, and all subsequent tax calculations report in this section, is based on data of 2016 car purchases by rental companies representing 60 percent of the sector.

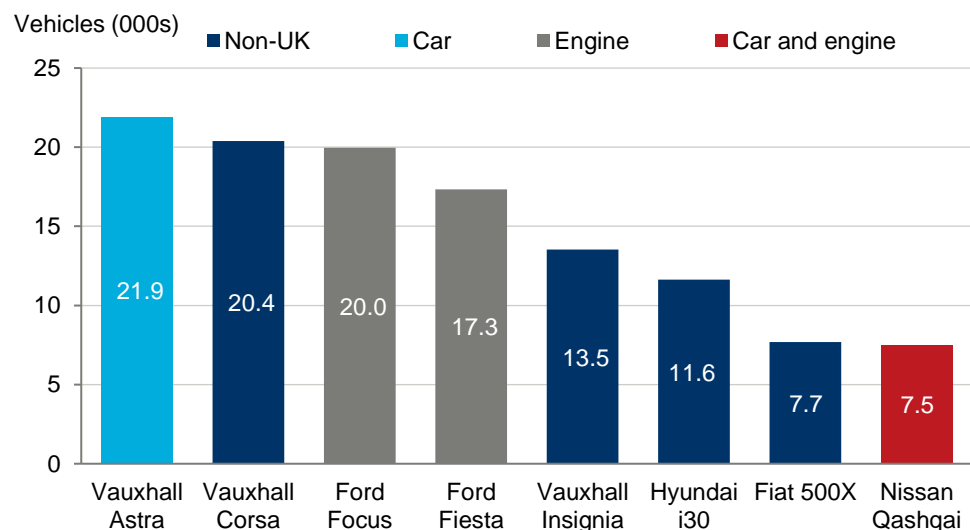
**Fig. 1. Where cars purchased by the rental sector in 2016 were made**



Source: BVRLA; Oxford Economics. Note: Totals may not sum due to rounding.

**Four of the rental sector’s eight most common purchases were manufactured to some extent in the UK.** In total, 33 models purchased by the rental sector in 2016 were manufactured wholly or partly in the UK. The sector’s most commonly purchased car, the Vauxhall Astra, accounted for nearly seven percent of the purchases and is manufactured (excluding the engine) at the company’s Ellesmere Port site. Engines for the Ford Fiesta and Ford Focus, accounted for over six and five percent of purchases, respectively, and are produced at Ford’s Bridgend and Dagenham plants. The Nissan Qashqai (over two percent of purchases) is wholly produced in Sunderland.

**Fig. 2. Most common rental sector purchases, 2016**



Source: BVRLA, Oxford Economics

But the proposed changes to VED have led companies in the sector to review their future vehicle purchases due to rising operating costs. If the sector was to repeat its 2016 car purchases, the total VED paid by its companies will reach more than £55 million, an increase of nearly £44 million compared to the

# 24,800

*Fewer cars could be purchased by the rental sector because of VED changes*

sector's payments under the old structure. This rise captures the effects of the sector being unable to recoup a proportion of VED if the vehicle is sold within a year—a common practice in the industry, where cars are retained for an average of nine months. If the ability to recoup VED on cars retired from the fleet was maintained in the new structure, the sectors payments would be £14 million lower, at £41 million.

In the face of such cost increases, the sector will reduce its car purchases, choosing to retain vehicles for longer instead. Estimates informed by discussions with BVRLA members in late 2016 indicate that—assuming all other things are equal—some 24,800 fewer vehicles will be purchased by the rental sector in 2017 because of the changes to VED.<sup>3</sup> The purchases foregone are equivalent to eight percent of the total rental fleet in the UK.

### **SUCH A SIZABLE PURCHASE OF VEHICLES SUPPORTS SIGNIFICANT ECONOMIC ACTIVITY**

This study considers the economic impact of an equivalent purchase of 24,800 cars made in 2016 in order to illustrate the importance of a large vehicle purchase to the UK economy. Following the procurement profile of the largest rental companies operating in the UK, we estimate that 8,000 (32 percent) of these cars purchased were manufactured either partly or wholly in the UK, providing an important stimulus to the UK automotive sector. The purchase will generate further economic activity through sales at UK dealerships who handle the transactions.

The rental sector's purchase of cars contributes to the UK economy through three distinct channels. Its supports activity in the vehicle manufacturers and dealerships (the direct effect), and in their domestic supply chains (the indirect effect). Finally, the wage-financed consumer spending of those employed directly or indirectly because of the vehicle purchases supports further activity throughout the UK (the induced effect). We quantify each of these channels using three metrics: Gross Value Added (GVA)<sup>4</sup> contribution to GDP, employment, and tax receipts generated by economic activity (including Corporation Tax, Income Tax, National Insurance Contributions, and VED).

### **THE IMPACT IS FELT PRIMARILY IN THE AUTOMOTIVE SECTOR**

**Not surprisingly, the purchase of these vehicles has a significant impact on the UK's automotive sector.** The purchase of 24,800 cars in the UK is estimated to have sustained a £20 million value added contribution to GDP by the automotive sector in 2016. This impact consisted of:

<sup>3</sup> Oxford Economics surveyed six of BVRLA's largest rental companies, who together account for over 60 percent of the total rental fleet in the UK. Each company was asked how VED would affect their purchasing decisions in percentage terms. Their responses were then translated into a proportion of each firm's rental fleet and aggregated to give an average. This average, expressing the number of car purchases that would not go ahead due to VED changes as a share of fleet size, was then applied to the total rental fleet.

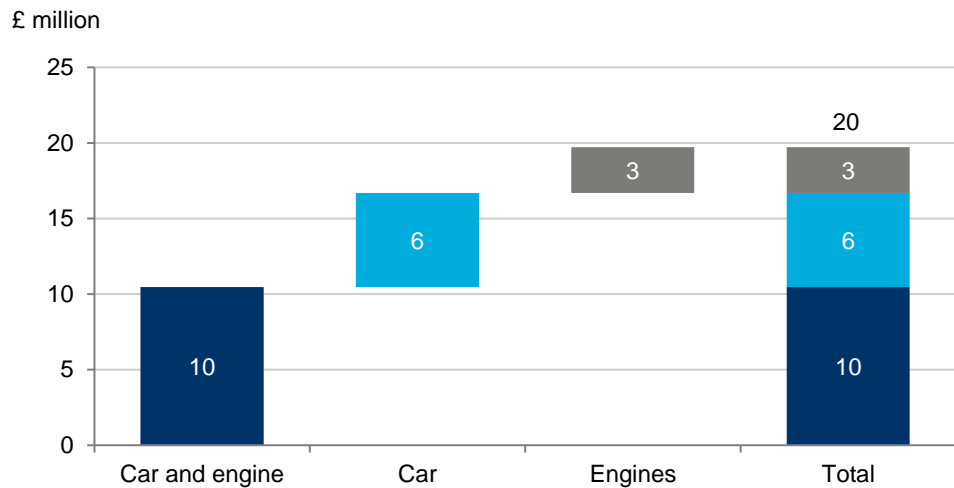
<sup>4</sup> The GVA contribution of any business is equal to the sum of its profits (in EBITDA terms) and its employee compensation payments to its workforce.

**£20 million**

*Contribution to GDP  
generated in the automotive  
sector*

- A £10 million contribution to GDP from the purchase of over 1,800 wholly UK-made cars. The manufacture of these vehicles was largely located at Nissan’s site in the North East (1,100 cars), as well as at other sites across the country for Toyota, Jaguar, Mini, Honda and Infiniti;
- Over £6 million in value-added from the purchase of nearly 1,900 vehicles assembled in the UK (but with non-UK made engines).<sup>5</sup> Over 90 percent of these were Vauxhall Astra’s, manufactured in the North West; the remainder were various models of Land Rover; and,
- The purchase of nearly 4,300 vehicles featuring UK-made engines—including Ford and BMW models—generated a contribution to GDP of £3 million.

**Fig. 3. Contribution to GDP by the automotive sector**



Source: Oxford Economics; Note: totals may not sum due to rounding.

**The activity supported by the purchase of 24,800 vehicles is estimated to have sustained 200 jobs in the UK automotive sector in 2016.** Of these, over half (110) of the jobs were supported by the purchase of wholly UK-made cars. A further 60 jobs were supported by the purchase of vehicles assembled in the UK (but with non-UK made engines) and 30 jobs were supported by the domestic manufacture of engines

**By supporting economic activity and employment, the automotive sector paid £3.2 million in tax to the Exchequer because of the purchase.**

Specifically, the sector is estimated to have paid due to the purchase:

- £1.3 million in National Insurance Contributions;
- Around £1 million in Income Tax;
- Almost £400,000 in Corporation Taxes; and,
- Over £500,000 in other taxes on production and products.

<sup>5</sup> The manufacture of an engine is value at 17 percent of the total value of the car. The manufacture of a car excluding the engine is therefore considered to be 83 percent of the total value.

## **BUT IT ALSO HAS AN IMPACT ON THE WIDER ECONOMY**

**The impact of these car purchases is not limited to the automotive sector.**

The purchase of 24,800 vehicles will have a significant economic impact on the wider UK economy. The purchase will support activity in the domestic supply chains of the manufacturers supplying the 8,000 vehicles produced in the UK. Moreover, the purchase will sustain activity in the UK dealerships handling the retail process, and their supply chains. Finally, the purchase will generate wage-induced consumer spending throughout the UK from those employed in the manufacturing process, at dealerships and in supply chains.

The activity supported by the purchase in the wider economy comprises:

- More than £64 million in gross value added contribution to the UK economy;
- Around 1,070 jobs supported throughout the UK; and,
- Tax receipts of over £19 million to the Exchequer. This includes £880,000 in VED, based on 2016 rates. However, under the new VED structure this total would be over £4.2 million.

The fact that a greater impact is experienced outside of the automotive sector demonstrates the strength of its domestic supply chains. It also underlines the high productivity levels of the automotive sector.

Combining the impact in the automotive sector with that in the wider economy describes the total contribution made to the UK economy because of the car purchase. In total, the purchase of 24,800 car by rental companies in 2016:

- Delivered a £84 million contribution to UK GDP;
- Supported over 1,270 jobs; and,
- Raised nearly £23 million in tax receipts—equivalent to over ten percent of the £220 million investment into relieving congestion on the strategic road network announced by the government in last year's Autumn Statement.<sup>6</sup>

# £64 million

*Contribution to GDP  
generated elsewhere in the  
economy*

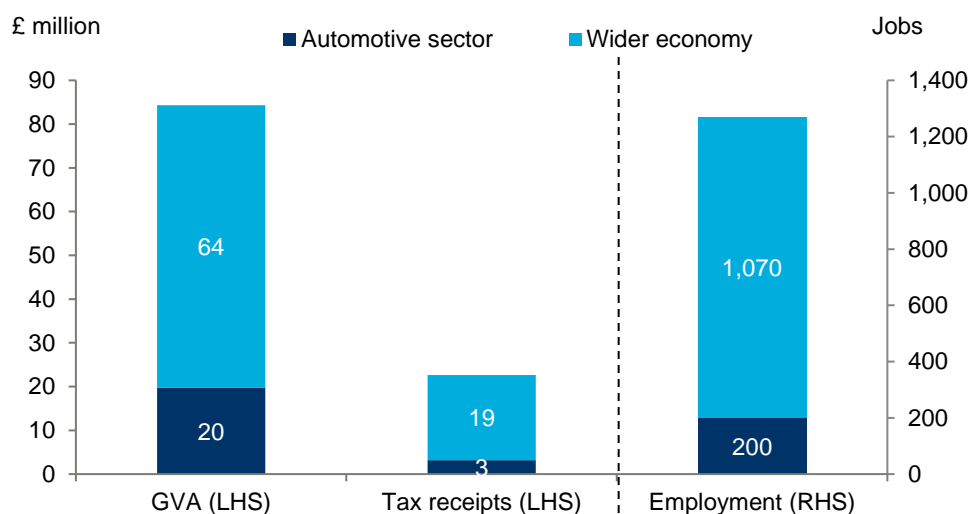
# 1,270

*Jobs supported throughout  
the economy by the car  
purchase*

<sup>6</sup> Department for Transport, (2016), 'Roads Investment: the roads funding package'



**Fig. 4. Economic impact of 24,800 car purchases by rental sector, 2016**



Source: Oxford Economics. Note: LHS=Left-hand scale; RHS=Right-hand scale

**KNOCK-ON EFFECTS WILL ALSO BE FELT IN OTHER WAYS—IN THE USED CAR SECTOR AND IN VEHICLE FUEL EFFICIENCY**

**However, this is not the full extent of the potential economic impact of such a purchase by the rental sector.** This report does not account for the further activity generated by the disposal of rental cars when they are retired from the commercial fleet. This generates activity in the UK’s auction houses and dealerships as they sell the sector’s disposed cars into private markets. This retail process will support a further contribution to GDP, employment, and tax receipts (including VAT on the sale of used vehicles) that is not captured in this analysis.

**The purchase of vehicles by the rental sector also plays a role in enhancing the fuel efficiency of vehicles on the UK’s roads.** Data from 2016 indicate the average car purchased by the rental sector has lower CO<sub>2</sub> emissions than the average new car on UK roads (116.3g/km compared to 121.4g/km overall in 2015).<sup>7</sup> As the rental sector retires cars from its fleet, the UK will experience the environmental benefits of a more efficient vehicle stock as these vehicles enter the used market. The SMMT estimates that the CO<sub>2</sub> emissions for an average used car are over 20 percent higher than the average new model so it can be assumed that if each used car on the road was replaced by a used rental model would save on average 23.7g/km in CO<sub>2</sub> emissions.<sup>8</sup> In addition, an increased supply of newer vehicles will generally increase the safety ratings of the UK’s vehicle stock.

**A reduction in car purchases by the rental sector caused by the VED changes will have knock-on effects both in the used market and on the efficiency of vehicles on the UK’s roads.** Not only will fewer new, fuel-efficient vehicles enter the UK market, the sector will also hold onto vehicles for

<sup>7</sup> SMMT, (2016), ‘New Car CO<sub>2</sub> Report 2016’

<sup>8</sup> SMMT, (2016), ‘New Car CO<sub>2</sub> Report 2016’

longer. By keeping vehicles for longer, the rental sector will reduce the number of models entering the used market, decreasing activity, employment and tax receipts it generates. Moreover by reducing vehicle disposals, the VED changes could lead to less efficient vehicles on the UK roads being used for longer, further undermining the government's aims of reducing vehicle emissions.

## **CONCLUSION**

The rental sector drives a significant part of the demand for new cars, particularly those made in the UK. Every year its purchases support considerable activity in the UK's automotive sector and its domestic supply chain, generating value added, employment and tax revenues throughout the UK.

However, the significant changes to the rate and structure of VED being introduced by the government in April 2017 will see rental companies pay over nearly five times more on the average car in the first year of ownership compared to what they would have paid under the previous system. In the face of such increases, the sector expects to reduce its purchase of new cars by an estimated 24,800 cars.

In 2016, an equivalent purchase of 24,800 cars made an important contribution to the UK economy. Through the operational activity of manufacturers and dealerships, their supply chains and wage-financed consumer spending, this scale of purchase generated a total value added contribution to the UK economy of £84 million, £23 million in tax receipts and supported 1,270 jobs. The total tax revenues raised from this purchase equated to over a tenth of the £220 million investment into relieving congestion on the strategic road network announced by the government in last year's Autumn Statement.<sup>9</sup>

However, the full extent of this purchase reaches beyond these impacts. Further activity occurs in the UK's used vehicle market, supporting additional GDP, employment and tax receipts, reducing average emission levels and increasing average safety ratings. Each of these is threatened in some substantial way by the changes to VED that are due in just two months time.

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<sup>9</sup> Department for Transport, (2016), 'Roads Investment: the roads funding package'

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