



**CAPITAL ECONOMICS**

# BOOSTING INSURERS' PROFITS

An analysis of the impact of the United Kingdom government's proposed whiplash reforms

March 2017

**A report by Capital Economics for Access to Justice**

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# EXECUTIVE SUMMARY

Capital Economics has been commissioned by Access to Justice (A2J) to research and report upon the government's proposed whiplash reforms.<sup>1</sup>

## Key findings:

- It is commonly believed that motor accident rates have fallen as personal injury claims have risen. This is a false impression. The downward trend in motor accidents recorded by the police reflects the reduced likelihood of an incident being reported rather than of reduced incidents overall. A key contributing factor to this is the decline in the number of police traffic officers
- The insurance industry blames rising motor insurance premiums on personal injury claims but there are other explanations. With the insurance business model reliant on firms generating investment returns on their reserves and capital, low interest rates following the financial crisis have been partly responsible for rising premiums
- The government believes that the motor insurance industry will pass on a material proportion of any savings from its outlined reforms to motorists. However, the reality is that the industry is less competitive than they have assumed. Instead of resulting in meaningfully reduced premiums for motorists, the reforms are more likely to boost insurers' profits by up to £0.7 billion per annum

The government has outlined reforms to arrangements for personal injury claims in England and Wales in order to disincentivise minor soft tissue injury claims. The rationale is to lower motor insurance premiums for consumers by reducing the number of so-called 'whiplash' claims stemming from road traffic accidents. However, it is a mistaken belief that 'whiplash' claims have been responsible for rising motor insurance premiums in the United Kingdom in recent years.

The evidence on the numbers of motor accidents and insurance claims, and the relationship between them, is widely misunderstood. The number of traffic accidents recorded by the police has declined in recent years. However, evidence suggests that the number of traffic incidents overall has not fallen. The downward trend in police recordings more likely reflects the reduced likelihood of an incident being reported than of reduced incidents overall. Central to this has been the material decline in the number of police traffic officers over the last decade.

Personal injury claims have not fallen in line with the number of road traffic accidents recorded by police. This is unsurprising given the lack of evidence of a decline in motor traffic incidents that have occurred. What's more, the government's legal reforms in the 1990s have improved access to justice and allowed more victims of road traffic incidents to receive compensation for the losses, including medical complaints such as soft tissue injuries, which they have incurred. In addition,

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<sup>1</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

while the total value of claims rose consistently each year to 2010, much of the increase reflected only general inflation.

The trends in legitimate personal injury claims are not because of what's become known as 'whiplash fraud'. The insurance industry reports that 99 per cent of motor insurance claims are paid out – yet, somewhat paradoxically, there is a common belief that fraud is rife in this market. In addition, there are few successful prosecutions for fraud each year. The problem appears to lie in the Association of British Insurer's data on supposed motor insurance 'fraud'. The definition they deploy is broad and goes beyond any legal basis – and arguably, any common-sense meaning. (See chapter 1.)

Understanding the motor insurance business model is important for assessing the level of competition in the industry, and therefore the likelihood that the outlined reforms could achieve the government's stated aims of reducing premiums for motorists.

Each policy is a specific contract that is bespoke to the unique characteristics and risk profile of a policyholder, rather than being a commoditised product. An insurer's ability to price a risk accurately depends on the quality of the information they hold, such as historic claims made by policyholders given certain risk characteristics. This intellectual property is proprietary and closely guarded, which increases the barriers to entry in the market and makes it a less competitive market.

The government has assumed, in its outlined reforms, that the motor insurance industry is competitive on price. At first glance, the motor insurance market in the United Kingdom is characterised by a large number of insurance providers. One way in which this is demonstrated is by the use of a price-comparison website, which can give the impression that a consumer can receive many competitive quotes from seemingly different providers.

However, in reality, many of these quotes will all, in the end, be provided by the same underwriting group. This is the ultimate company that decides whether or not to take on the risk of insuring the customer, how much coverage they should receive and how much they should have to pay for it. An underwriting group may offer coverage through multiple brands. For example, nine leading underwriting groups represent 31 different brands in the United Kingdom. Our analysis suggests that while a motorist might receive around two quotes on average that are competitively priced, only 1.5 of these would be from different underwriting groups. This means that they are effectively choosing insurance coverage from fewer than two firms on average, which is hardly the sign of a competitive market.

Interest rates and investment returns are critical to the insurance business model. The industry sets aside income from premiums as reserves to cover future claims, which can then be invested in suitable financial instruments. The cash flow generated from these enables the insurers to cover their outgoings and make a profit, even at lower premium levels. This business model was broadly effective until the fall in interest rates after the financial crisis. Without the ability to earn a return

from investing their policyholders' cash and prudential reserves, motor insurance providers were forced to raise premiums to maintain profitability.

While the debate on rising motor insurance costs has focused on so-called 'whiplash fraud', there is little evidence to suggest that personal injury claims are responsible for recent substantial increases in motor insurance premiums. The insurance industry's own estimates indicate that, after accounting for inflation, the total amount they paid out on what they describe as 'whiplash' or soft tissue injury claims declined by 17 per cent between 2007 and 2016. Over the same period, official statistics suggest that premiums increased by an average of 71 per cent.

It is more likely that low interest rates, rather than personal injury claims, have been responsible for rising premiums. (See chapter 2.)

The rationale behind the government's proposals to reform the soft tissue injury claims process is to reduce the price of motor insurance premiums for consumers. This can only happen if the proposals deliver savings for the insurance industry and if these savings are then passed onto consumers. The percentage of any savings that are passed onto consumers as a reduction in premiums is called the pass-through rate. The government's proposals use a pass-through rate of 85 per cent, suggesting that for every pound saved per policy, premiums would be reduced by 85 pence. The high pass-through rate assumption relies on weak assumptions: the motor insurance industry is competitive and consumers are provided with a commoditised product; and firms respond to cost decreases in the same way that they do to cost increases.

Economic theory suggests that the characteristics of the motor insurance market – insurers don't offer a commoditised product and consumers only receive competitive quotes from a few underwriting groups – would result in a low cost pass-through rate. What's more, the government's assumption is based on analysis that examined what the pass-through rate for additional costs or additional revenues might be. Looking specifically at the likely impact of cost reductions, evidence from other industries suggests that firms do not respond to cost decreases in the same way that they do to cost increases. It is more likely that a firm will increase prices than decrease them. While it would have been likely that insurers would have passed on a significant proportion of a cost increase, perhaps in the region of 50 to 70 per cent, it is unlikely that any cost reductions that result from the proposed reforms would be passed on to the same degree.

The proposed reforms are unlikely to achieve the government's stated aims and benefit consumers. Instead, the reforms are likely to boost insurers' profits by between £0.5 billion and £0.7 billion per annum. (See chapter 3.)

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# 1 ROAD TRAFFIC ACCIDENTS AND INSURANCE CLAIMS

In this section, we evaluate recent trends in road traffic accidents and insurance claims. First, we assess the evidence on motor accidents and insurance claims. Second, we analyse the extent to which there is 'whiplash' fraud.

## 1.1 Claims and accident data

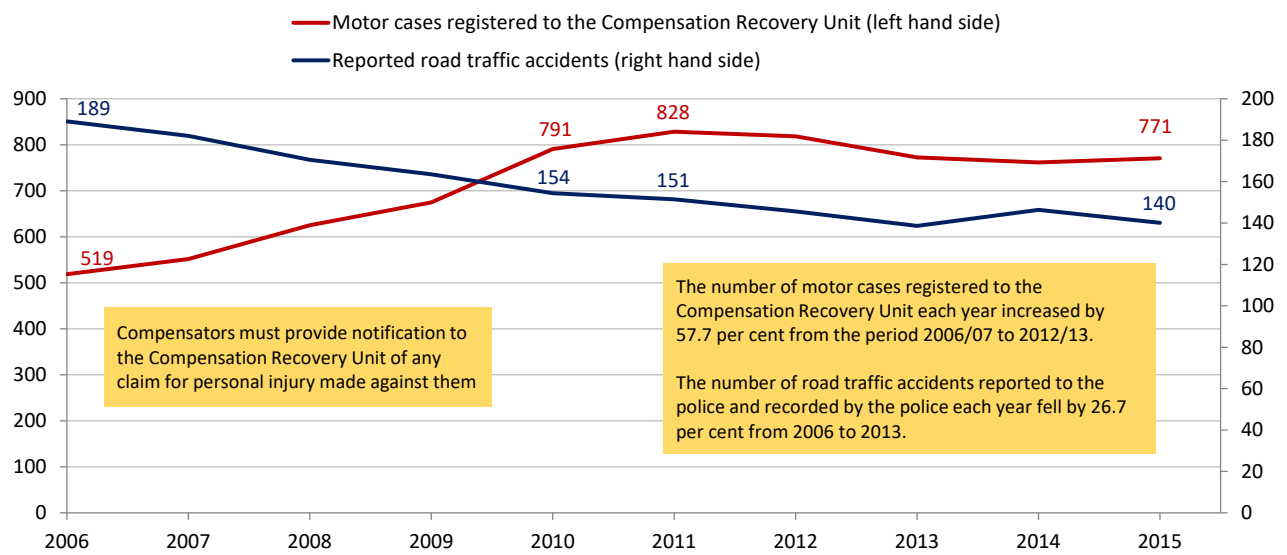
The evidence on the numbers of motor accidents and insurance claims, and the relationship between them, is widely misunderstood. It has been correctly reported that, over the last ten years or so, the number of traffic accidents recorded by the police has declined as the number of personal injury claims resulting from motor accidents has risen.<sup>2</sup> The number of traffic accidents recorded by the police has fallen from around 190,000 in 2006 to 140,000 in 2015. Over the same period, the number of motor accident personal injury cases has risen from around 520,000 each year to around 770,000. (See Figure 1.)

Despite the number of reported road traffic accidents recorded by the police falling over the last ten years, there is little to suggest that the number of traffic incidents overall has reduced. Hospital admissions data show little sign that the total number of hospitalisations after road accidents have fallen. What's more, hospital data suggest that the total number of clinically seriously injured casualties from road accidents has remained broadly constant over the last decade compared with a material decline in the number of accidents recorded by the police. (See Figure 2.)

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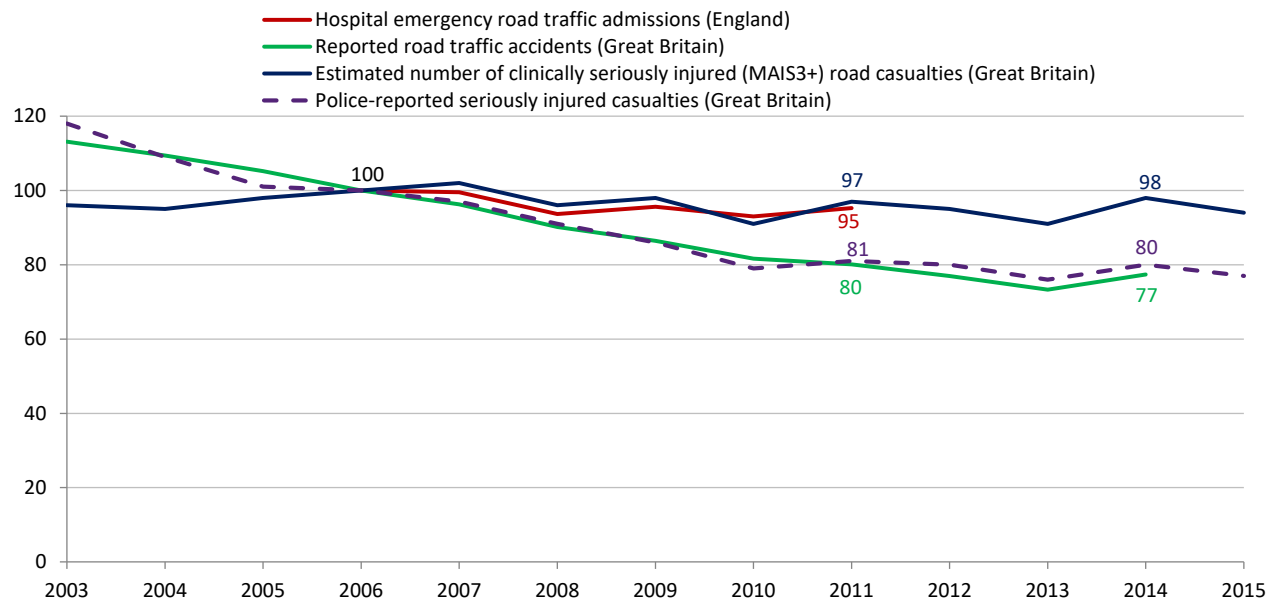
<sup>2</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

Figure 1: Number of motor cases registered to the Compensation Recovery Unit each year (thousands) and number of road traffic accidents in Great Britain, which involve human injury or death, that are reported to and recorded by the police each year (thousands)



Sources: Capital Economics, Compensation Recovery Unit and Department for Transport. Note: annual data for motor cases registered to the Compensation Recovery Unit are not based on a calendar year. We have assumed that data for 2006/07 relate to the calendar year 2006, for example.

Figure 2: Number of road traffic accidents reported to the police, number of road traffic accidents, which involve human injury or death, that are reported to and recorded by the police each year, hospital emergency road traffic admissions and estimated number of clinically seriously injured (MAIS3+) road casualties (indexed, 2006 = 100)



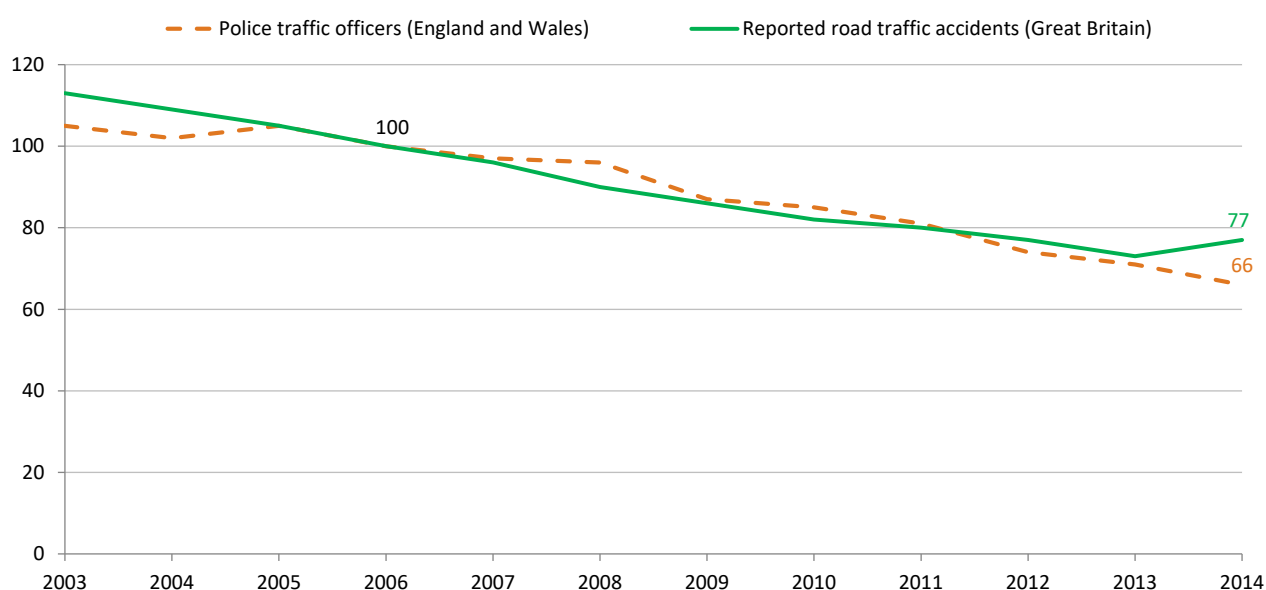
Sources: Capital Economics, Department for Transport and The National Health Service Digital



There are good reasons to suggest that the downward trend in police recordings more likely reflects the reduced likelihood of an incident being reported than of reduced incidents overall.

There has been a material decline in the number of police traffic officers over the last decade. Indeed, there is a strong correlation between the number of accidents or offences recorded by the police and the number of police traffic officers. Between 2003 and 2014, the number of road traffic accidents reported to, and recorded by, the police fell by 31.6 per cent. The number of police traffic officers declined by 36.9 per cent over the same period. (See Figure 3.)

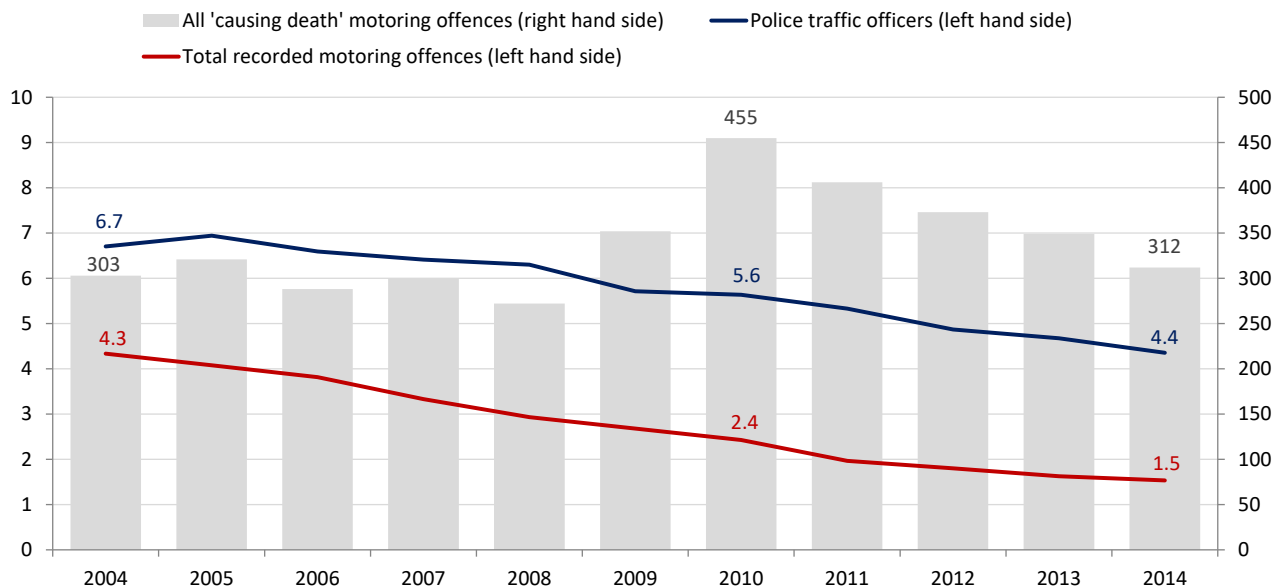
**Figure 3: Number of road traffic accidents reported to the police and police traffic officers (indexed, 2006 = 100)**



Sources: Capital Economics, Department for Transport and HL Deb 23 February 2015 vol 759 c 4899W

Further evidence corroborates the importance of the decline in police traffic officers for the number of recorded motoring incidents. While the number of road traffic offences has fallen, the number of “causing death” offences, which will always be recorded where they occur, has not fallen. From 2004 to 2014, the number of road traffic offences fell from 4.3 million to 1.5 million while the number of “causing death” offences rose from 303 to 312. (See Figure 4.)

**Figure 4: Number of police traffic officers (thousands), number of 'causing death' motoring offences and total number of motoring offences (millions) in England and Wales**



Sources: Capital Economics, Home Office, Ministry of Justice, Department for Transport and House of Commons Transport Committee, *Road traffic law enforcement: Second Report of Session 2015-16* (The Stationery Office, London), 2016. Note: Total recorded motoring offences includes findings of guilt at all courts, fixed penalty notices and written warnings. All 'causing death' motoring offences includes 'causing death by dangerous driving', 'causing death by careless driving under the influence of drink or drugs', 'causing death by careless or inconsiderate driving' and 'causing death by driving unlicensed, disqualified or uninsured drivers'.

The House of Commons Transport Committee has concluded that this is significant as it suggests that the reduction in overall offences does not represent a reduction in offences being committed.<sup>3</sup> This is supported by specific examples of motoring offences. For example, whilst fewer drivers have been caught for using their mobile phones, which suggests a fall in offences being committed, survey evidence suggests that motorists are increasingly using their mobile phones when driving i.e. a rise in the number of offences actually being committed.<sup>4,5</sup>

In addition, the public may have a reduced incentive to report accidents to the police, which they don't have to do so by law.<sup>6</sup> First, the police have campaigned against wasting police time.<sup>7</sup> Second, the non-emergency '101' number was introduced in January 2012 with the aim of giving the public a number for their local police to report crimes and concerns that don't require an emergency response.<sup>8</sup> However, this may have disincentivised motorists from reporting accidents. Analysis shows that the public had misapprehensions over the use of the number and these

<sup>3</sup> House of Commons Transport Committee, *Road traffic law enforcement: Second Report of Session 2015-16* (The Stationery Office, London), 2016

<sup>4</sup> RAC, *Shock statistics reveal 'alarming' rise in illegal mobile phone use behind the wheel* (RAC Press Centre, Bristol), 2016

<sup>5</sup> The British Broadcasting Corporation, *Fewer drivers on mobile phones 'caught by police'* (The British Broadcasting Corporation, London), 2016

<sup>6</sup> According to the Road Traffic Act of 1988 one needs to report an accident to the police only if they do not wish to divulge their personal information and vehicle identification marks to the other party involved in the car accident. See Road Traffic Act 1988 s.52, Part VII, Section 170.

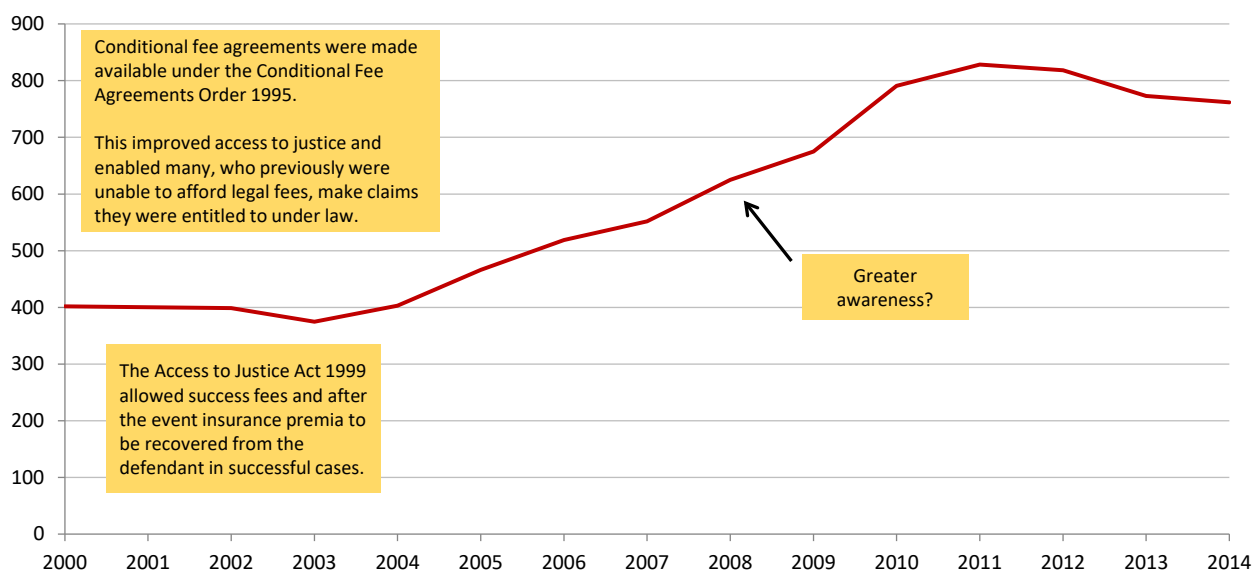
<sup>7</sup> The British Broadcasting Corporation, *Campaign against 999 time-wasters* (The British Broadcasting Corporation, London), 2004

<sup>8</sup> The Home Office, *Single non-emergency 101 police number launched* (The Home Office, London), 2012

misapprehensions discouraged some members of the public from reporting non-emergency incidents.<sup>9</sup> Although the government has since launched multiple campaigns to try to encourage the use of the '101' number, it is likely that the public is discouraged from reporting non-emergencies to the police when they are told "don't bother calling 101" by a senior member of the police force.<sup>10,11,12</sup> Finally, the public's knowledge of the decline in police traffic officers may have influenced the likelihood that they would report an accident they were involved in.

Given the lack of evidence of a decline in motor traffic incidents, it is unsurprising that there has not been a fall in personal injury claims over the same period as the decline in the number of road traffic accidents recorded by the police. Government legal reforms in the 1990s have improved access to justice and allowed more victims of road traffic incidents to receive compensation for the losses, including medical complaints such as soft tissue injuries, which they have incurred.<sup>13</sup> (See Figure 5.)

**Figure 5: Number of personal injury claims made each year from motor accidents (thousands)**



Sources: Capital Economics, Compensation Recovery Unit and Richard Lewis, Annette Morris and Ken Oliphant, *Tort Personal Injury Claims Statistics: Is There a Compensation Culture in the United Kingdom* (Cardiff Law School, Cardiff), 2006.

What's more, while the total value of claims rose consistently each year to 2010, much of the increase reflected only general inflation. Between 1991 and 2010, the value of claims rose 116 per

<sup>9</sup> McKenna K., Smith N., Williams J. and Gardner R., *Rolling out the police single non-emergency number (101): research into the public's and practitioners' views* Rolling out the police single non-emergency number (101): research into the public's and practitioners' views (Home Office, London), 2012

<sup>10</sup> The Home Office, *101 – The easy to remember police number* (The Home Office, London), 2014

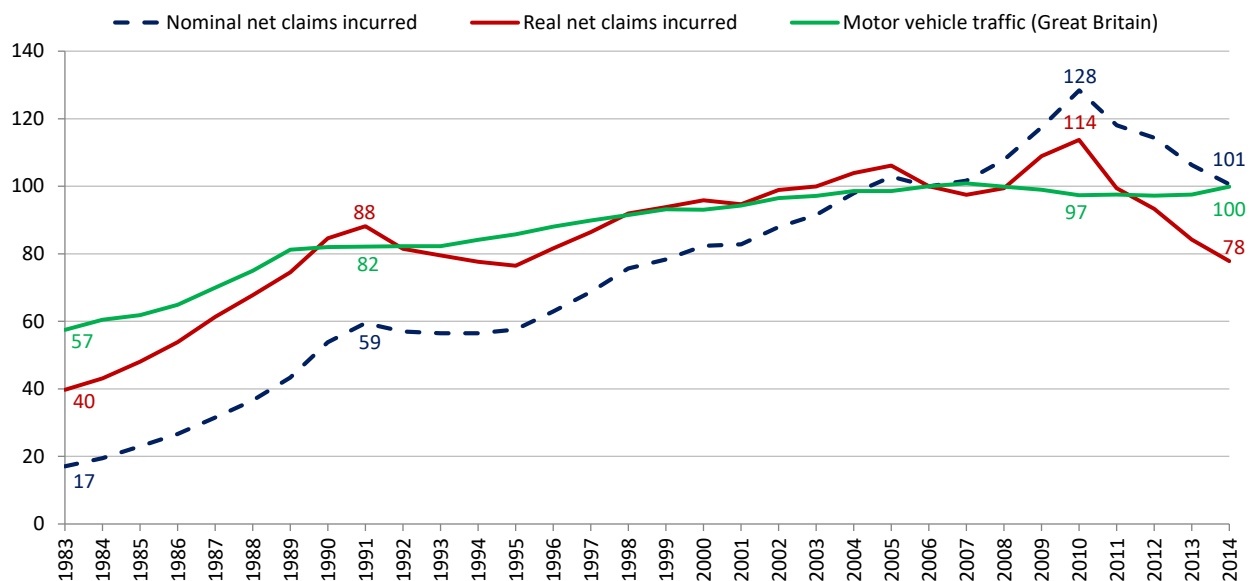
<sup>11</sup> The Home Office, *Home Office launches a campaign to raise awareness of the 101 police number* (The Home Office, London), 2016

<sup>12</sup> ITV News, *Police chief tells public: Don't bother calling 101 non-emergency number – life's too short* (ITV News, London), 2015

<sup>13</sup> For example, the Conditional Fee Agreements Order 1995 and the Access to Justice Act 1999.

cent but, after allowing for inflation, the 'real' increase was only 29. The increase in the real value of motor claims has almost been matched by growth in the volume of road traffic, which rose by close to twenty per cent over the same period. In addition, it is important to note that the total value of motor claims fell between 2010 and 2014 by 32 per cent. (See Figure 6.)

**Figure 6: Nominal and real value of net claims incurred by the United Kingdom motor insurance industry and volume of motor vehicle traffic (indexed, 2006 = 100)**



Sources: Capital Economics, Department for Transport, Office for National Statistics and Association of British Insurers

## 1.2 Limited evidence of fraud

Trends in legitimate personal injury claims are conflated with what's become known (often inaccurately) as 'whiplash fraud'.<sup>14</sup> The insurance industry reports that 99 per cent of motor insurance claims are paid out – yet, somewhat paradoxically, there is a common belief that fraud is rife in this market.<sup>15,16</sup>

There is little evidence to suggest that fraud is prevalent. Aviva has previously claimed that it identified fraud on less than 1.9 per cent of claims it received in 2013.<sup>17</sup> In addition, there are barely any successful prosecutions for fraud each year. We have carried out a survey of legal firms and our analysis suggests that there are around 230 successful prosecutions for fraud on cases related

<sup>14</sup> HM Treasury, *Spending Review and Autumn Statement 2015* (The Stationery Office, London), 2015

<sup>15</sup> Association of British Insurers, *There when it matters – ABI publishes insurance claims success rates for the first time* (Association of British Insurers, London), 2016

<sup>16</sup> Insurance Fraud Taskforce, *Insurance Fraud Taskforce: final report* (HM Treasury, London), 2016

<sup>17</sup> Aviva, *Aviva detects £110 million of insurance fraud, up 19% over 2012* (Aviva, London), 2014

to personal injury compensation claims each year.<sup>18</sup> This compares to 770,000 personal injury claims made each year resulting from motor accidents.<sup>19</sup>

The reality that fraudulent claims are small in number is probably, in part, due to filtering processes that legal firms undertake before they are willing to accept a personal injury case. Law firms reject around 950,000 personal injury cases each year, which is close to the number that were registered to the Compensation Recovery Unit in 2015/16. Based on the outcomes of our survey, this means that only three per cent of these rejected cases are because of suspected fraud.<sup>20</sup>

The belief that there is widespread fraud in the motor insurance market may be explained in part by closer examination of the Association of British Insurers' data on supposed motor insurance 'fraud'. The definition that they deploy is broad and goes well beyond any legal basis – and, arguably, any common-sense meaning. (See Box 1.)

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<sup>18</sup> Analysis of Capital Economics' survey of law firms in 2016.

<sup>19</sup> Department for Work and Pensions, *Transparency data Number of cases registered to CRU* (Department for Work and Pension, London), 2017

<sup>20</sup> Data on rejected personal injury cases comes from our analysis of Capital Economics' survey of law firms in 2016. Data on cases registered to the Compensation Recovery Unit are available from the Department for Work and Pensions.

**Box 1: Association of British Insurers' guidance to members on classifying "fraud" for the purposes of their statistical returns**

**'Proven' fraud**

Any party seeking to obtain a benefit under the terms of any insurance related product, service or activity can be shown, on a balance of probabilities, through its actions, to have made or attempted to make a gain or induced or attempted to induce a loss by intentionally and dishonestly (i) making a false representation, and/or (ii) failing to disclose information, and/or (iii) having abused the relevant party's position

And, one or more of the following outcomes has taken place which relates to the fraudulent act:

- An insurance policy application has been refused
- An insurance policy or contract has been voided, terminated or cancelled
- A claim under an insurance policy has been repudiated
- A successful prosecution for fraud, the tort of deceit or contempt of court has been brought
- The relevant party has formally accepted his/her guilt in relation to the fraudulent act in question including, but not limited to, accepting a police caution
- An insurer has terminated a contract or a non-contracted relationship/recognition with a supplier or provider
- An insurer has attempted to stop/recover or refused a payment(s) made in relation to a transaction
- An insurer has challenged or demonstrated that a change to standing policy data was made without the relevant customer's authority

**'Suspected' fraud**

Where a handler having an actual suspicion of fraud (e.g. manual fraud indicator(s), tip off, system generated "high risk" referral etc.) challenges the applicant at point of sale/claimant by letter, telephone call or instruction of an investigator etc., to clarify key information, provide additional information or documentation etc., and the applicant/claimant subsequently:

- Fails to provide further documentation or co-operation
- Formally withdraws the application/claim (by phone, e-mail or letter) without a credible explanation
- Allows all communication with the insurer to lapse despite the insurer's reasonable attempts to re-establish contact
- Accepts (without a credible explanation) either a substantial reduced settlement offer in respect of a claim, or a substantially increased premium in respect of an application/renewal (other than in cases where there has been a careless misrepresentation)

Sources: Capital Economics and Association of British Insurers

There are several problems with the Association of British Insurers' definition of 'proven fraud'. First, it is a balance of probabilities assessment, so almost inevitably includes some instances of behaviour that were wrongly assessed as fraudulent. Second, only two of the supporting outcomes could be legally interpreted as proven fraud, being a successful prosecution for fraud or the acceptance of a police caution. The remainder would not, so this raises concerns that the legitimate claims are being classified as 'proven fraud'.

In addition, there are multiple issues with the definition of 'suspected fraud'. First, it includes cases where the claimant fails to provide further documentation for the insurer, fails to maintain contact with the insurer or withdraws the claim. There can be many legitimate reasons for these actions on the part of the claimant, including other commitments, such as lack of time, a belief that insurer requests have become too burdensome and illness or working abroad for a period of time.

Second, the list of reasons includes the claimant accepting reduced settlements. The inclusion of this point shows that rather than pursue them to the courts, insurers are willing to pay out to claimants they suspect of being fraudulent.

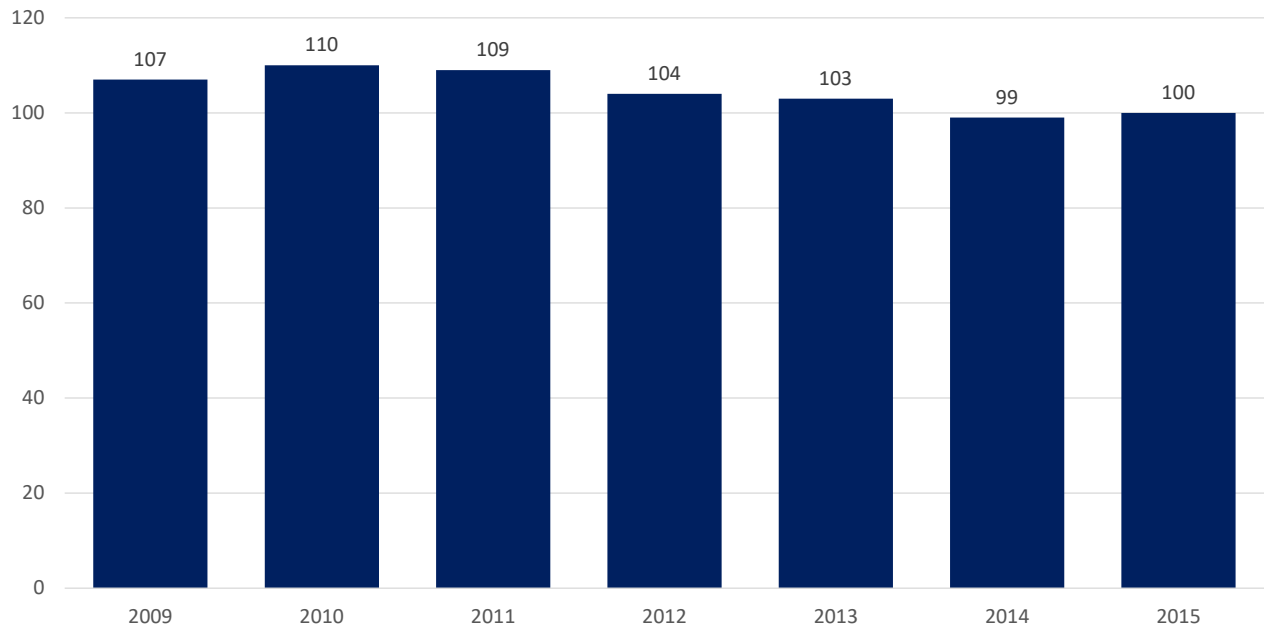
# 2 DRIVERS OF INSURANCE PREMIUMS

In this section, we consider what drives the pricing of insurance premiums. First, we analyse the nature of the insurance industry. Second, we assess the typical insurance sector business model. Third, we analyse the level of competition in the motor insurance industry. Fourth, we evaluate the importance of interest rates and insurers' investment returns to premium pricing decisions. Fifth, we consider the extent to which 'whiplash' claims contribute to insurers' costs.

## 2.1 The insurance industry

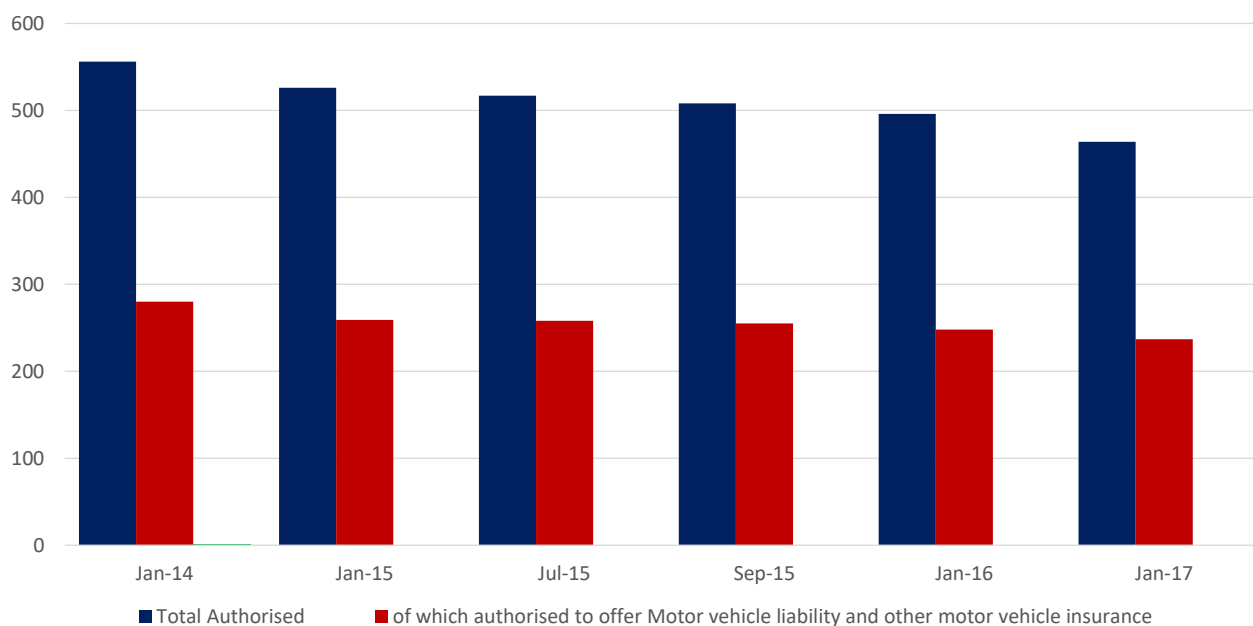
There are 464 firms authorised to offer insurance in the United Kingdom. The latest annual figures suggest that in total the industry employs around 100,000 workers. Of these 464 firms, 237 are authorised to offer motor vehicle liability and other motor vehicle insurance. (See Figure 7 and Figure 8.)

Figure 7: Employment in United Kingdom insurance industry (thousands)



Sources: Capital Economics and Office for National Statistics



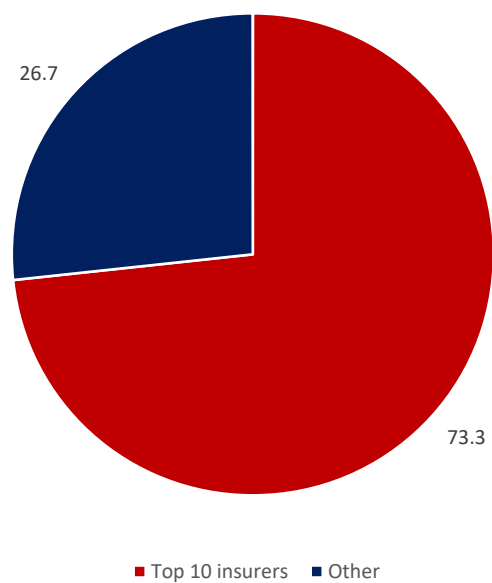
**Figure 8: Number of United Kingdom authorised insurers**

Sources: Capital Economics and Bank of England

The motor insurance industry can be split into private motor insurance and commercial motor insurance. Market density is relatively high in the private motor insurance industry with the top ten insurers covering nearly three-quarters of the market.<sup>21</sup> In order of market share, these ten insurers in 2014 were: Direct Line Group, AVIVA, Ageas Insurance Limited, Liverpool Victoria Friendly Society Limited, Admiral Group plc, AXA UK plc., Hastings Insurance Group Limited, Allianz Insurance plc, esure Group and RSA Insurance Group plc. (See Figure 9.)

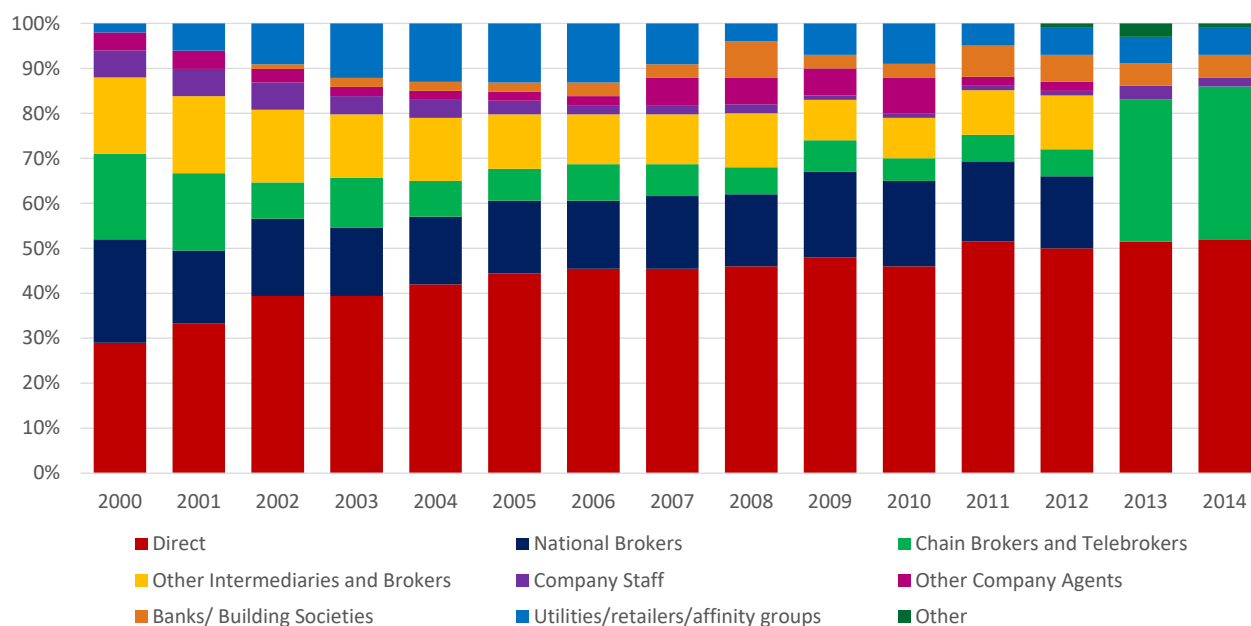
<sup>21</sup> Association of British Insurers, *Company Rankings 2014 – Motor* (Association of British Insurers, London), 2014

Figure 9: Market share of private motor insurers on United Kingdom gross written premiums (2014, per cent)



Sources: Capital Economics and Association of British Insurers

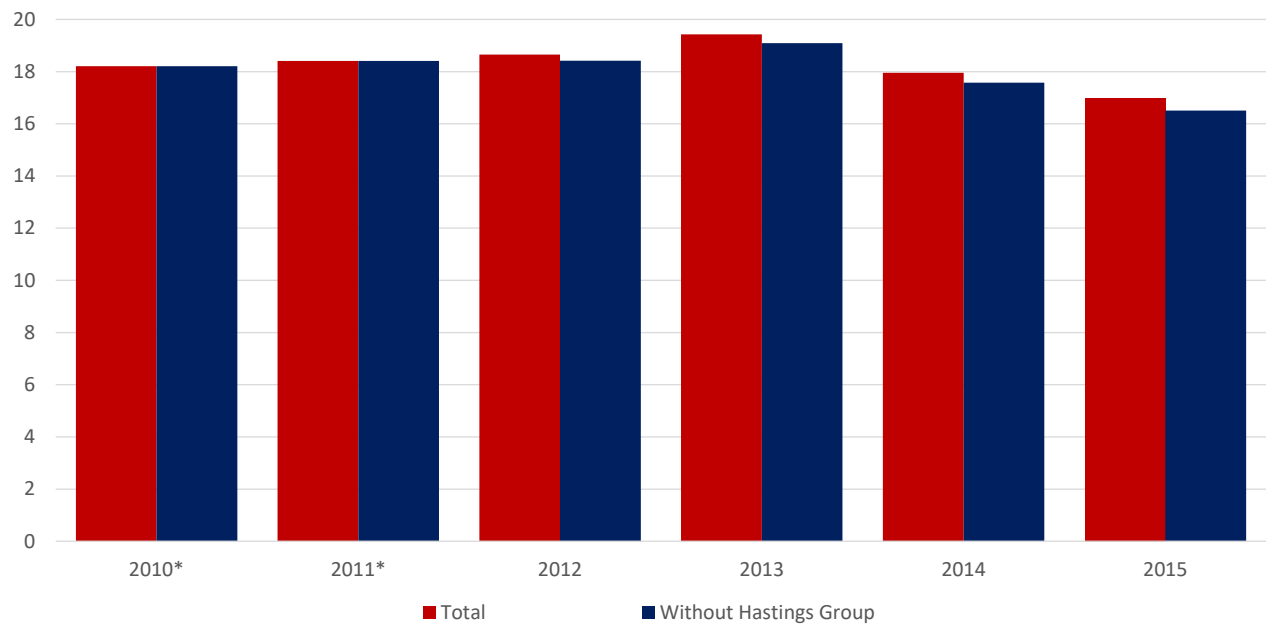
Motor insurance is sold through a number of different channels. It can be sold directly from insurer to the consumer, through independent intermediaries such as national brokers or chain brokers and telebrokers, through company agents such as company staff, through banks and building societies, as well as through other types of retailers. Sales made directly from the insurer have typically been the largest sales channel in the United Kingdom. (See Figure 10.)

**Figure 10: Distribution channels for motor insurance (2000-2014, per cent)\***

Sources: Capital Economics and Association of British Insurers. \*Data on national brokers, chain brokers and telebrokers and other intermediaries and brokers was reported as one – independent intermediaries – in 2013 and 2014. As such, the number on chain brokers and telebrokers shows the full sum of this. This is also true for data on company staff and company agents, whose data for 2013 and 2014 is shown on the chart under company staff.

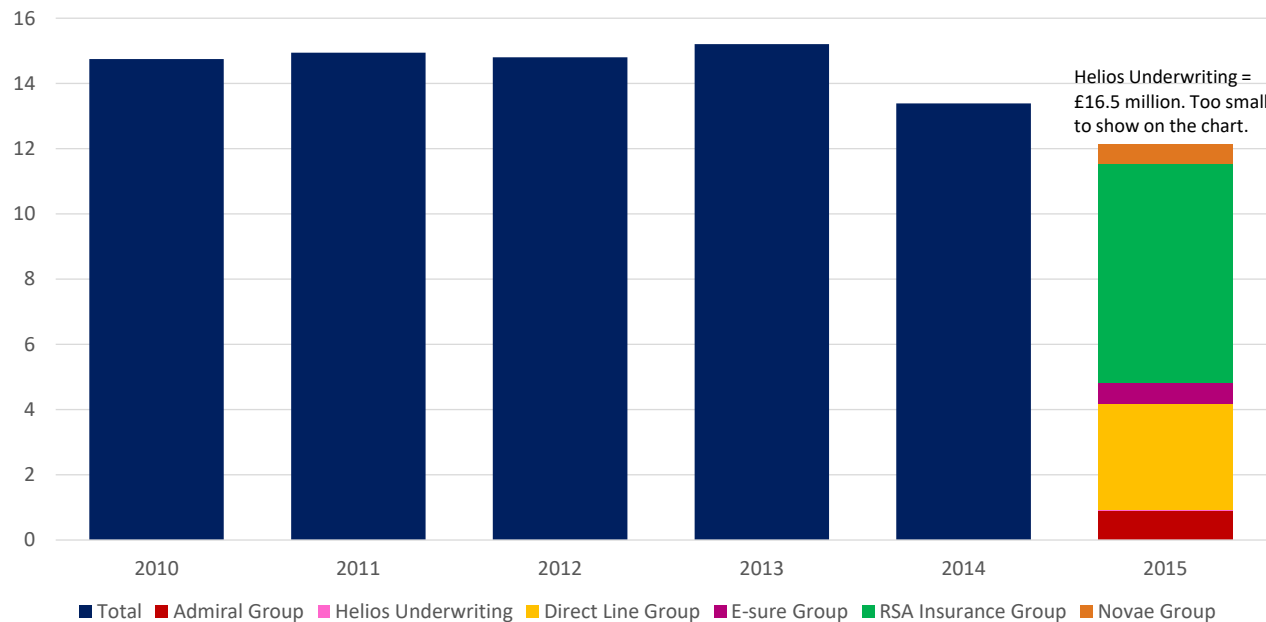
Revenue at general insurers and those that sell motor insurance has fallen in recent years. (See Figure 11 and Figure 12.)

Figure 11: Total operating revenue of the non-life insurance firms listed on the FTSE all-share (£ billions)



Sources: Capital Economics and Thomson Datastream. Note: firms included are Beazley, Personal Group Holding, Admiral Group, Lancashire Holding, Hiscox, Pro Global Insurance Solutions, Helios Underwriting, Randall and Quilter Investment Holdings, Direct Line Group, esure Group, RSA Insurance Group, Novae Group, Jardine Lloyd Thomson and Hastings Group. \*Hastings Group data not available.

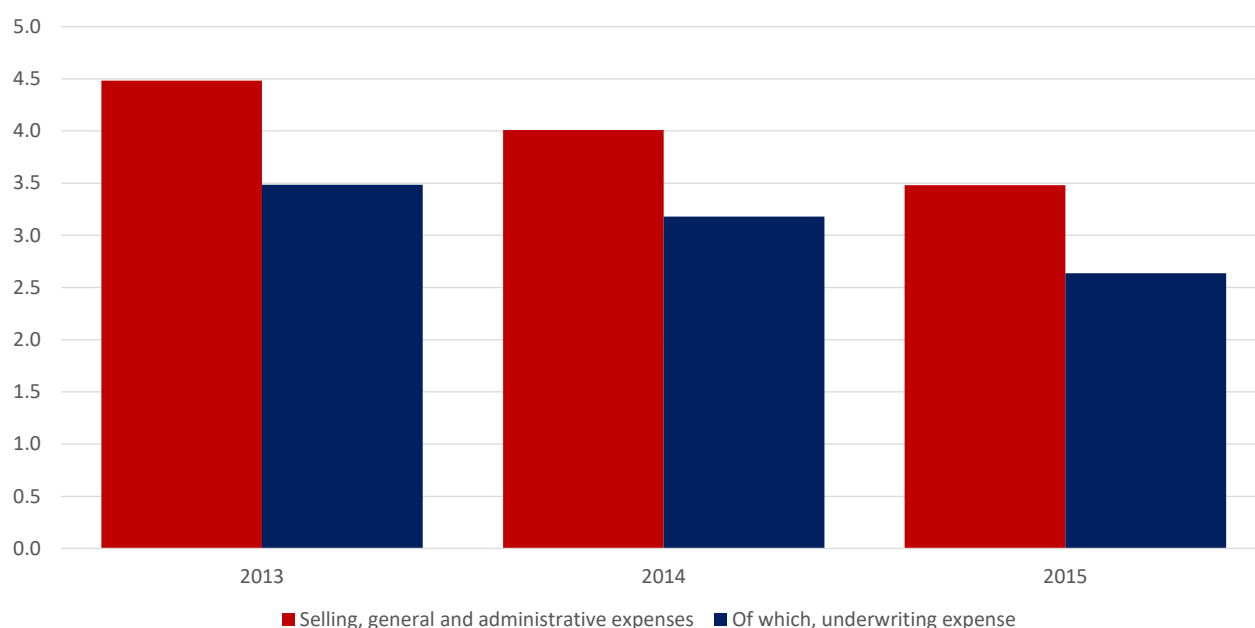
Figure 12: Total operating revenue of six non-life insurance firms listed on the FTSE all-share that sell motor insurance (£ billions)



Sources: Capital Economics and Thomson Datastream. Note: there are currently seven non-life insurance firms listed on FTSE that sell motor insurance but data for Hastings Group was only available for 2015 since it has only been a year since its initial public offering. As such it was excluded from the analysis so that all years represented are based on the same sample of firms.

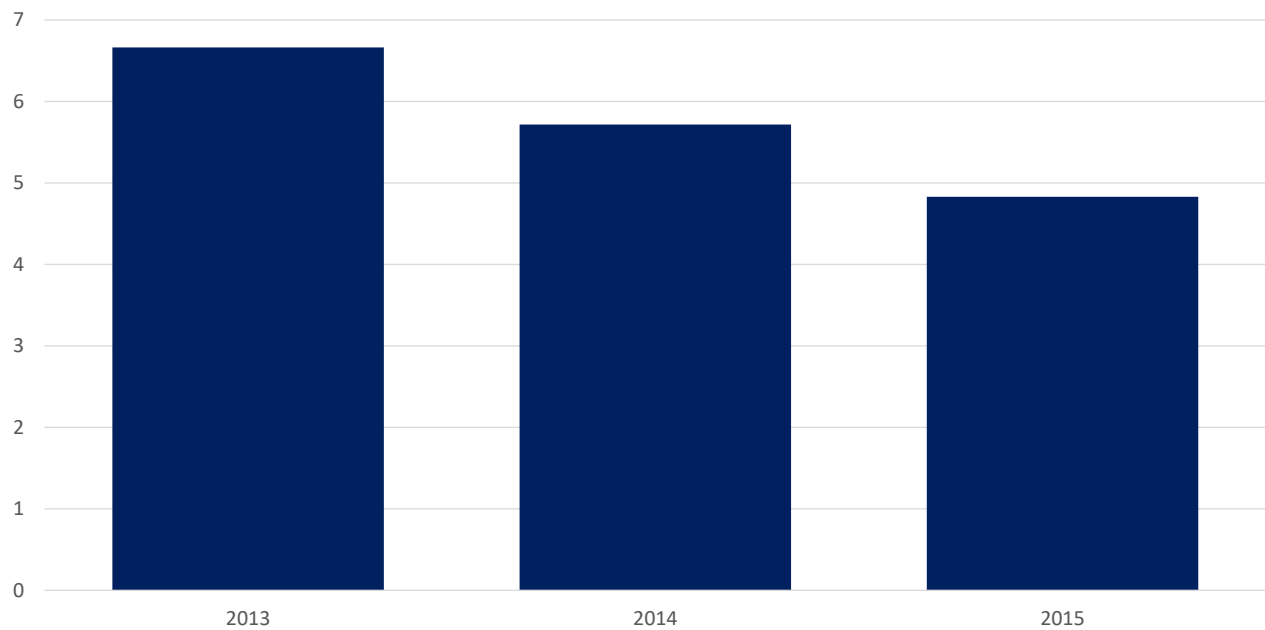
Insurance firms' annual accounts show that their costs have also been falling over the past three years. Selling, general and administrative expenses incurred by insurance firms have fallen over this period. The largest share of these expenses was underwriting expenses which have themselves decreased. Claim and loss expenses have also fallen for insurance firms. Selling, general and administrative expenses and claim and loss expenses typically make up 96 per cent of insurance firms' costs. (See Figure 13, Figure 14 and Figure 15.)

**Figure 13: Total selling, general and administrative expenses of five non-life insurance firms listed on the FTSE all-share that sell motor insurance (£ billions)**



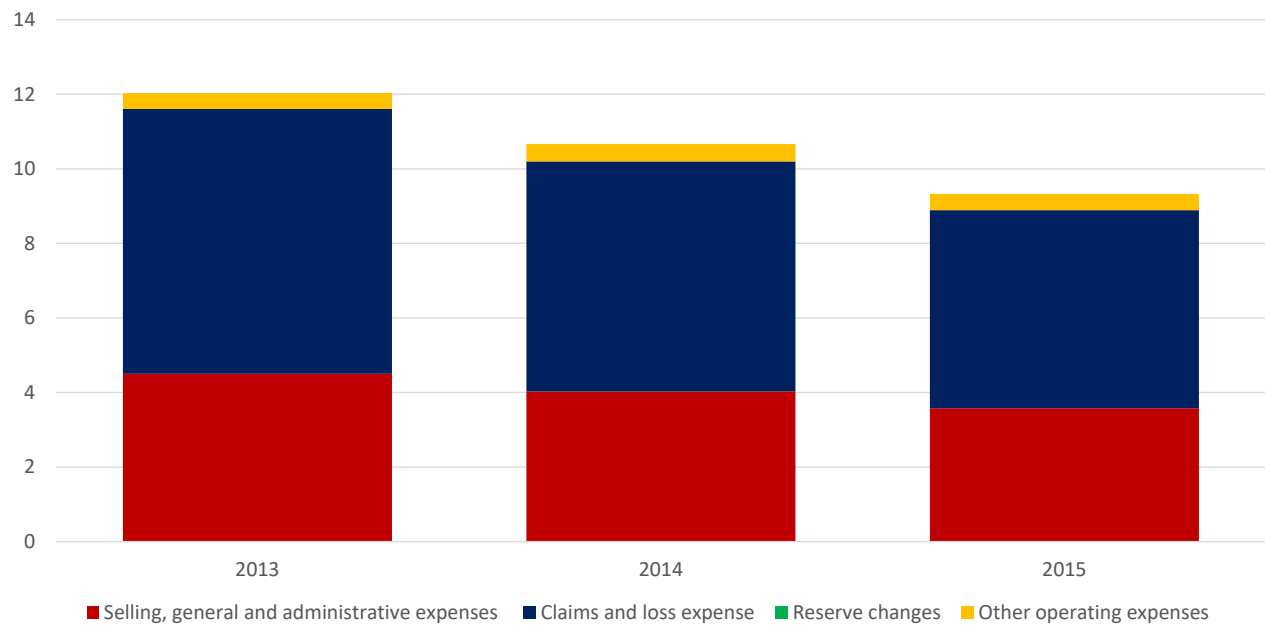
Sources: Capital Economics and Thomson Datastream. Note: Only five of the seven firms currently listed on the FTSE that are non-life insurance firms and sell motor insurance had both total selling, general and administrative expenses data and a breakdown to show the share of underwriting expense data for the past three years. These were: Admiral Group, Direct Line Group, RSA Insurance Group, Novae Group and Hastings Group.

**Figure 14: Total claim and loss expenses of five non-life insurance firms listed on the FTSE all-share that sell motor insurance (£ billions)**



Sources: Capital Economics and Thomson Datastream. Note: To compare with the costs data in the selling, general and administrative expenses analysis we here use the same five firms' data. These firms were: Admiral Group, Direct Line Group, RSA Insurance Group, Novae Group and Hastings Group.

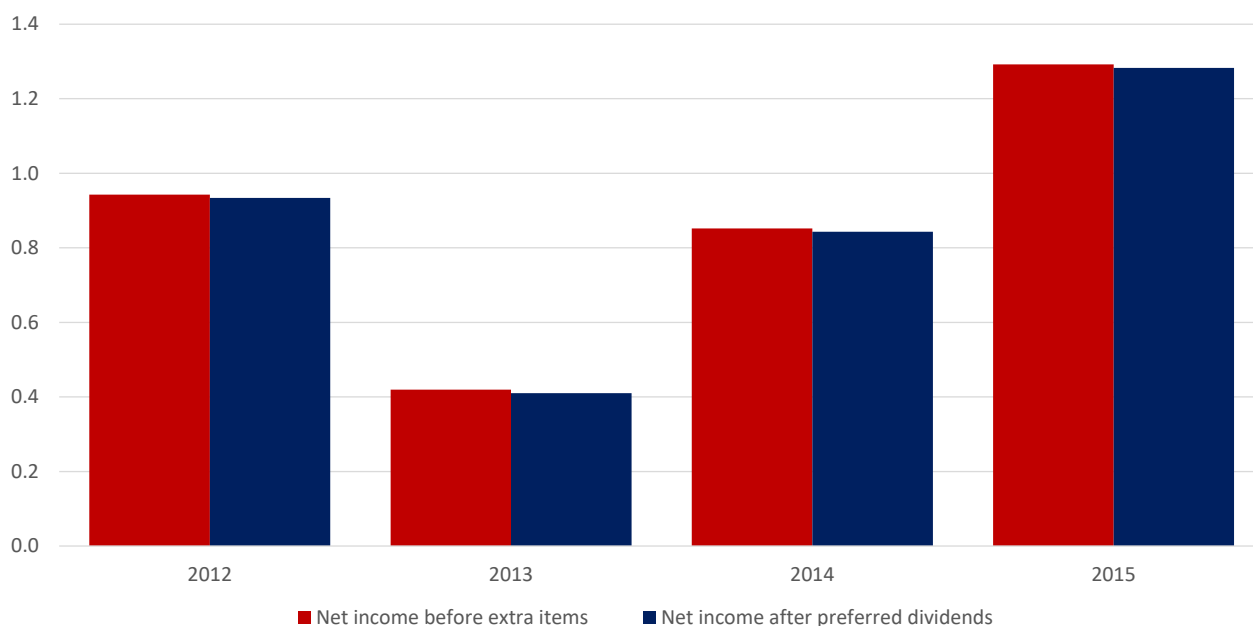
**Figure 15: Total expenses of six non-life insurance firms listed on the FTSE all-share that sell motor insurance (£ billions)**



Sources: Capital Economics and Thomson Datastream. Firms included: Admiral Group, Direct Line Group, esure Group, RSA Insurance Group, Novae Group and Hastings Group. Note: There was not an available breakdown of selling, general and administrative expenses for esure Group to include it in the previous two figures. However, data was available to include esure Group in this chart as a breakdown was not needed.

Costs have fallen at a faster rate than revenues and general insurers that offer motor insurance have seen a rise in profitability in recent years. (See Figure 16.)

**Figure 16: Net income of the non-life insurance firms listed on the FTSE all-share that sell motor insurance (£ billions)**



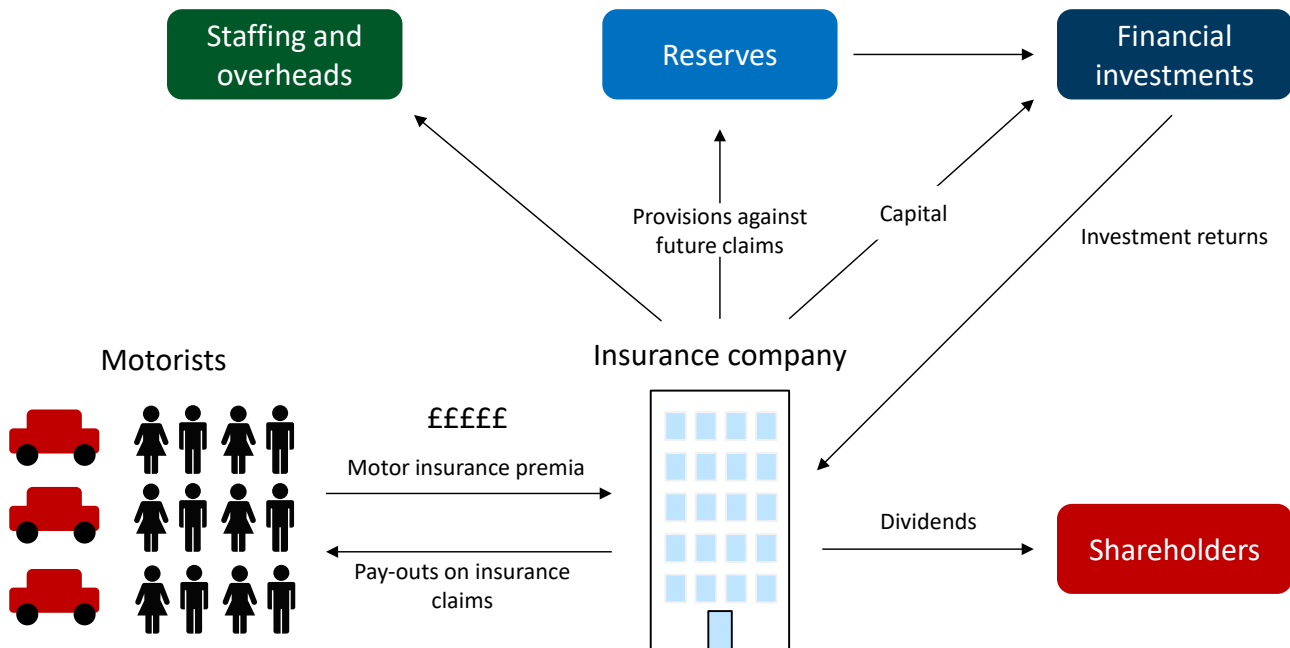
Sources: Capital Economics and Thomson Datastream. Firms included: Admiral Group, Helios Underwriting Group, Direct Line Group, esure Group, RSA Insurance Group, Novae Group and Hastings Group.

## 2.2 The insurance business model

The motor insurance business model is not widely understood. It is often assumed that insurance companies provide a commoditised product. In reality, each policy is a specific contract that is bespoke to the unique characteristics and risk profile of a policyholder. An insurer's ability to price a risk accurately depends on the quality of the information they hold. This intellectual property is proprietary and closely guarded, which increases the barriers to entry in the market.

Once the insurer provides a policyholder with a bespoke contract, they receive an income from the insurance premium. This is then used to cover staffing costs and overheads and a portion is set aside in the form of reserves. The reserves act as provisions against future claims. Along with the company's capital base, the insurer will invest their reserves in financial assets, which will generate investment returns and support the cash flow of the business. (See Figure 17.)

Figure 17: Stylised business model of an insurance company



Source: Capital Economics

## 2.3 Lack of true competition in the insurance industry

It is often perceived that the motor insurance industry is competitive on price.<sup>22</sup> At first glance, the motor insurance market in the United Kingdom is characterised by a large number of insurance providers. This is perhaps demonstrated by the use of a price-comparison website, which can give the impression that a consumer can receive many competitive quotes from seemingly different providers. The reality is somewhat different. Many of these quotes will all ultimately be provided by the same underwriting group. This is the company that decides whether or not to take on the risk of insuring the customer, how much coverage they should receive and how much they should have to pay for it. An underwriting group may offer coverage through multiple brands. For example, a consumer could receive quotes from four different brands of Admiral Group plc. If we expand our analysis to nine underwriting groups (including Admiral Group plc.), a consumer could receive quotes from 31 brands linked to those groups. (See Figure 18.)

<sup>22</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016



Figure 18: Car insurance brands of Admiral Group plc in the United Kingdom

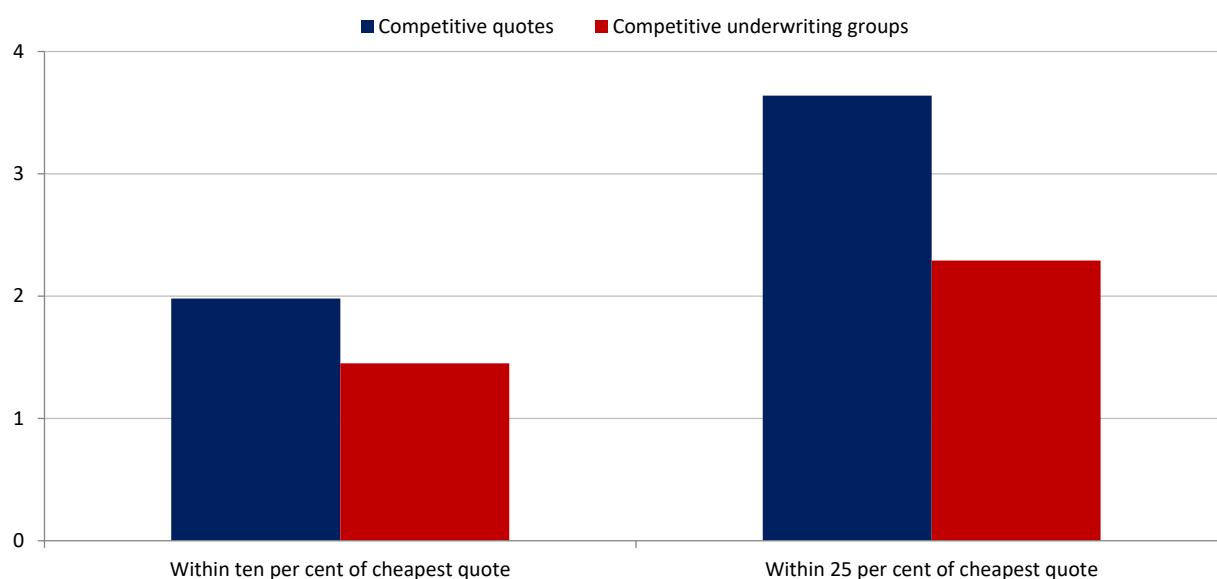


Sources: Capital Economics and Admiral Group plc

We have conducted a mystery-shopping exercise and our analysis suggests that a motorist might receive around two quotes priced within ten per cent of each other on average, but only 1.5 of these would be from different underwriting groups.<sup>23</sup> If we look at quotes that are priced with 25 per cent of the cheapest quotes, the number of competitive underwriting groups only increases to around 2.3. (See Figure 19.)

<sup>23</sup> We carried out analysis of the competitiveness of the motor insurance market by comparing quotes offered through a price-comparison website (moneysupermarket.com) and direct quotes (available from Direct Line Group). We analysed 105 different combinations for a variety of potential consumers. This covered four different ages (eighteen, 27, 40 and 65), five locations (ranging from a rural location in Wales to suburbs of Greater London), and five different types of car. We assessed the number of quotes that were priced within ten per cent of the cheapest quote and the number that were priced within 25 per cent of the cheapest quote. From this we identified whether or not these quotes had been made from the same underwriting group.

**Figure 19: Average (mean) number of competitive motor insurance quotes and competitive underwriting groups**



Sources: Capital Economics, moneysupermarket.com and Direct Line Group

Furthermore, around a quarter (23 per cent) of policyholders let their motor insurance policies renew automatically.<sup>24</sup> It is estimated that they collectively pay over £1 billion more each year than if they shopped around. These consumers are effectively only being served by a market of one firm.

It is important to note that low levels of actual competition may not lead to an uncompetitive outcome. This can happen if a market is perfectly contestable, which requires zero barriers to entry or exit and the ability for entry to be made rapidly. In such a scenario, the outcome will resemble perfect competition and no firm will be able to earn supernormal profits.

However, analysis of various measures of competition suggests that private and commercial motor insurance markets in the United Kingdom have displayed evidence of profit persistency.<sup>25</sup> If the market was truly competitive on price, competition between firms should ensure that prices for similar products are uniform across the industry. This would prevent firms from being able to earn positive economic profits over the long run.

<sup>24</sup> MoneySuperMarket.com, *Motor insurance auto-renewals* (MoneySuperMarket.com, Ewloe), 2015

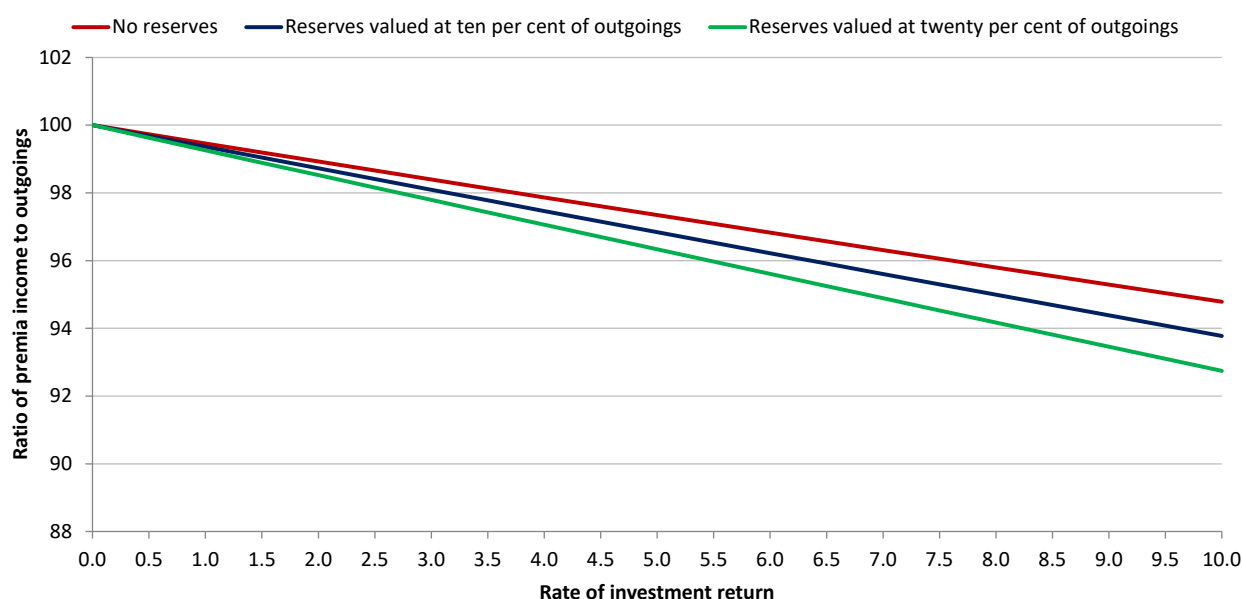
<sup>25</sup> Stephen Diacon and Dev Vencappa, *Profits Persistency in the UK Motor Insurance Markets* (Nottingham University Business School, Nottingham), 2011

## 2.4 The importance of interest rates and investment returns

Interest rates have a material impact on an insurer's pricing decisions through their effect on investment returns and periodical payment orders.

The insurance business model relies on firms generating investment returns on their reserves and capital. This is made possible by the structure of insurance contracts, whereby policyholders pay for their insurance coverage in advance of the period they will be covered for.<sup>26</sup> It is unlikely that all policyholders will make claims on the first day of their coverage. This allows insurers to set aside income from premiums as reserves to cover future claims, which can then be invested in suitable financial instruments. The cash flow generated from these enables the insurers to cover their outgoings and make a profit, even at lower premium levels. (See Figure 20.)

**Figure 20: Stylised model to show required ratio of premiums income to outgoings at different investment return rates (per cent) so that the insurer can cover all outgoings**

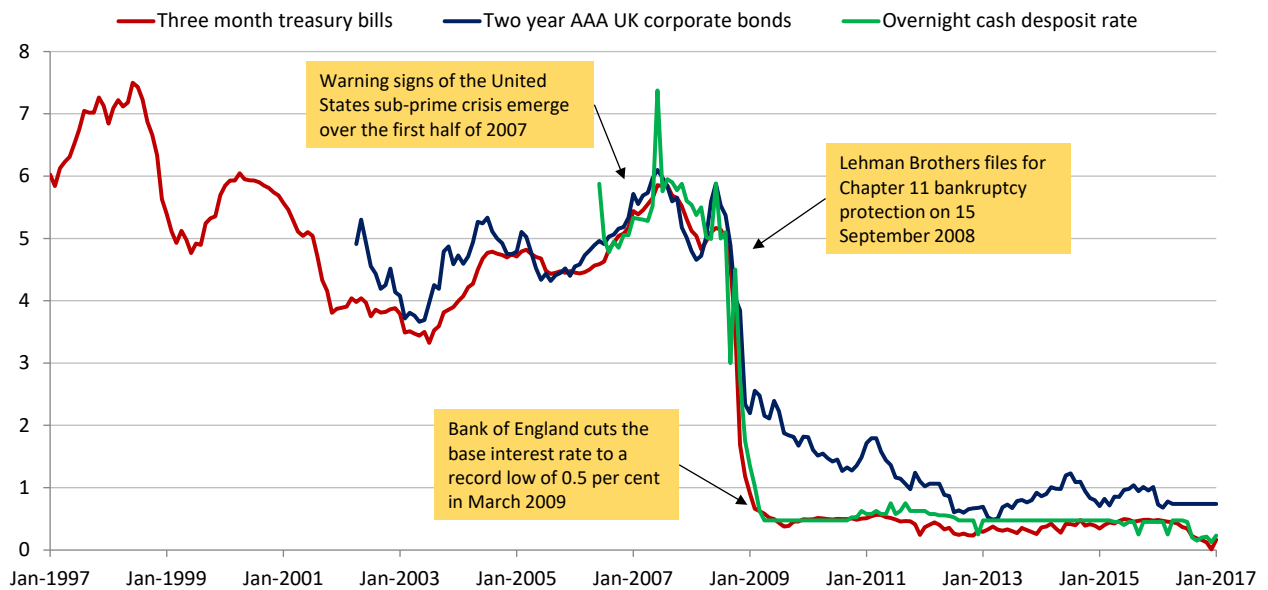


Source: Capital Economics

A typical motor insurance policy will cover a 12-month period, which makes it appropriate for the insurer to invest their reserves and capital in financial assets that can be released quickly to pay out on claims, such as cash or short term government or corporate bonds. This business model was broadly effective up until interest rates and investment returns plunged after the financial crisis. (See Figure 21.)

<sup>26</sup> This is still the case if a consumer chooses to pay monthly. In this scenario, the consumer has effectively taken out a loan with the insurance company and pays interest, which provides a guaranteed rate of return for the insurance firm.

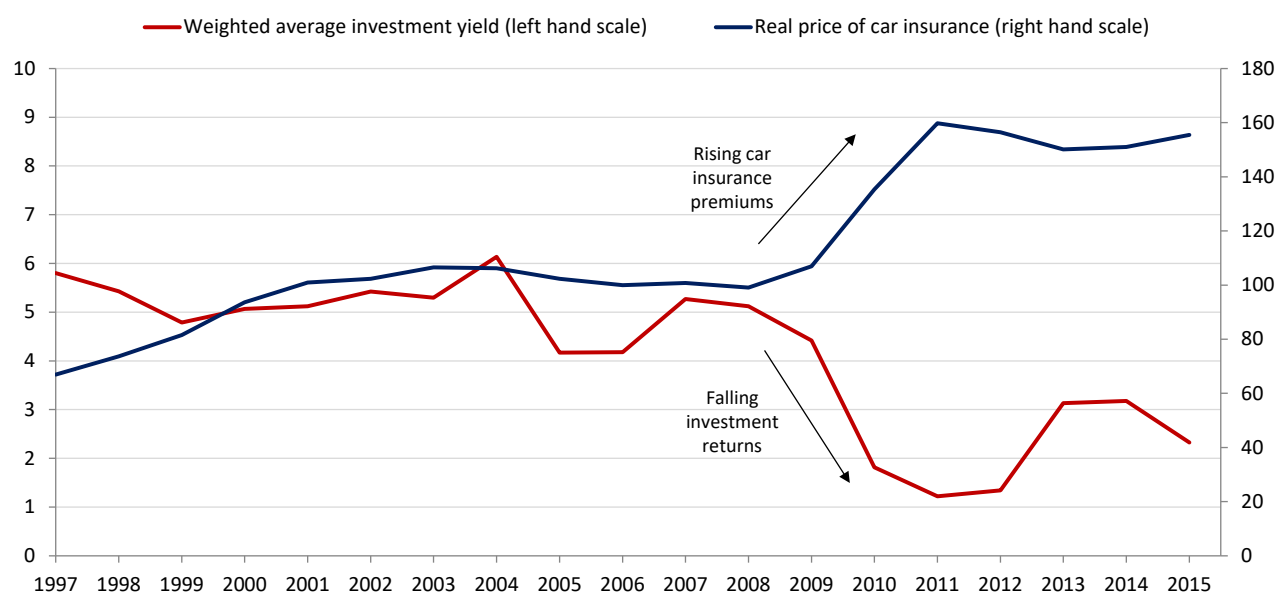
**Figure 21: Interest rates on United Kingdom three month treasury bills, two year AAA corporate bonds and overnight cash deposit rate (per cent, end of month)**



Sources: Capital Economics, Thomson Datastream, United Kingdom Debt Management Office and Tullett Prebon

Without the ability to earn a return from investing their policyholders' cash and prudential reserves, motor insurance providers were forced to raise premiums. The increase in premiums over 2008 to 2011 maps closely against the reduction in the rates of return that insurers achieved on their invested assets after the financial crisis. (See Figure 22 and Figure 23.)

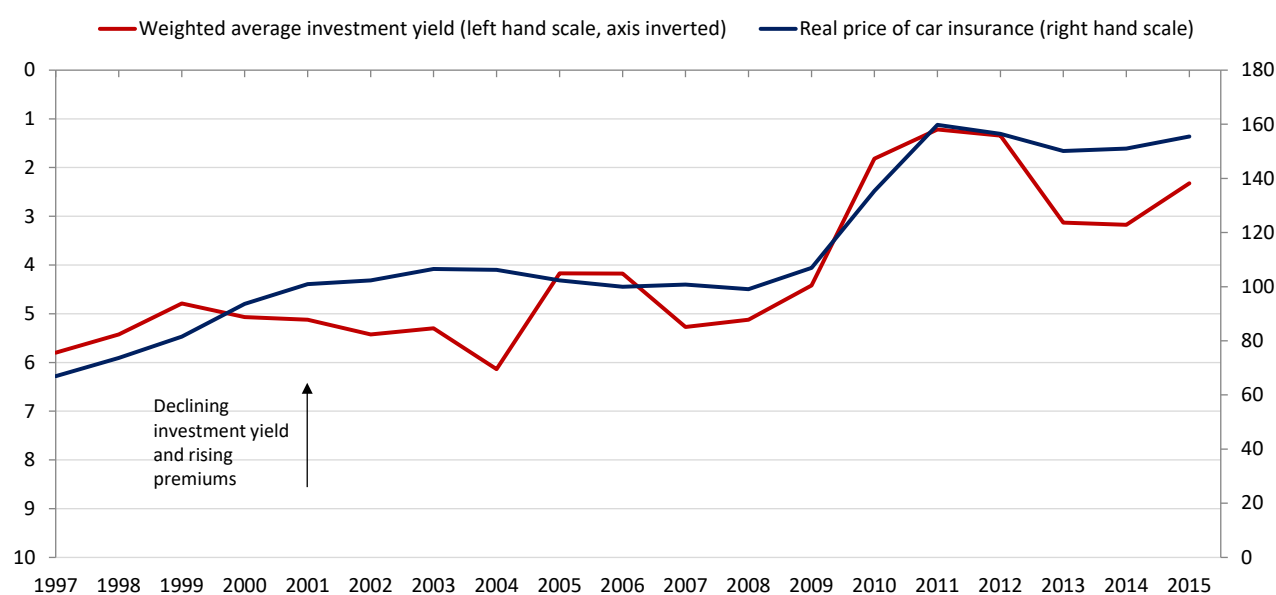
**Figure 22: Yield on United Kingdom general insurers' financial investments (per cent) and real cost of car insurance (2016 prices, indexed 2006 = 100)**



Sources: Capital Economics, Thomson Datastream and Office for National Statistics

This relationship can be seen closely if the left hand axis, which is for the weighted average investment yield, is inverted. (See Figure 23.)

**Figure 23: Yield on United Kingdom general insurers' financial investments (per cent) and real cost of car insurance (2016 prices, indexed 2006 = 100)**



Sources: Capital Economics, Thomson Datastream and Office for National Statistics

The fall in interest rates and investment market returns have also contributed to a material increase in periodical payment orders in recent years.<sup>27</sup> These are used to settle catastrophic injury claims in the United Kingdom. Compensation is paid to claimants at regular intervals, rather than in a single lump sum award, and mortality and investment risk is transferred from the claimant to insurers.<sup>28</sup>

The fall in market interest rates in recent years has meant that if a claimant opted for a lump sum reward and invested it over their lifetime, it is likely that they would, in total, have earned less than they would receive under a periodical payment order.<sup>29</sup> This is in part caused by the decision in 2008 to allow the use of wage inflation indices rather than the retail price index to update annual payments.<sup>30</sup> It would be expected in a growing economy that wage growth would outstrip general inflation, meaning that reserving for periodical payment orders has become more costly in recent years.

The rise in periodical payment orders is troublesome for insurance firms as they have to set aside greater levels of capital to ensure they can meet these payments in the future. The valuation of this required capital is uncertain though. First, the value of any capital kept aside will vary with market movements when the insurance firms invest it. Second, there is high uncertainty related to how long these payments will continue to be paid – they are usually based on life-expectancy estimates. Third, the capital requirement should change when new clients write policies with the insurance firm, as there is a risk that they will require period payments one day as well. Insurance firms therefore need to compensate for this higher uncertainty as a result of the periodical payment orders. One way of achieving this is by raising premiums.<sup>31</sup>

Meanwhile, the amount awarded to settle catastrophic personal injury claims is set to rise across the industry. This is a result of the government's decision to change the discount rate used to calculate the present value of an award. The discount rate is set to fall from 2.5 per cent (in real terms) to minus 0.75 per cent in March 2017. This will increase the value of an award that insurers have to pay out.<sup>32</sup>

For example, for an annual award of £25,000 in real terms, assuming a remaining lifetime of 25 years, the lump-sum pay-out would be equivalent to £0.5 million with the current 2.5 per cent discount rate. This would rise to £0.7 million with the new discount rate. (See Figure 24.)

<sup>27</sup> Towers Watson, *Insights Periodical Payment Orders (PPOs)* (Towers Watson, London), 2012

<sup>28</sup> GIRO Working Party 2011, *Periodic Payment Orders Revisited* (GIRO Working Party 2011, London), 2011

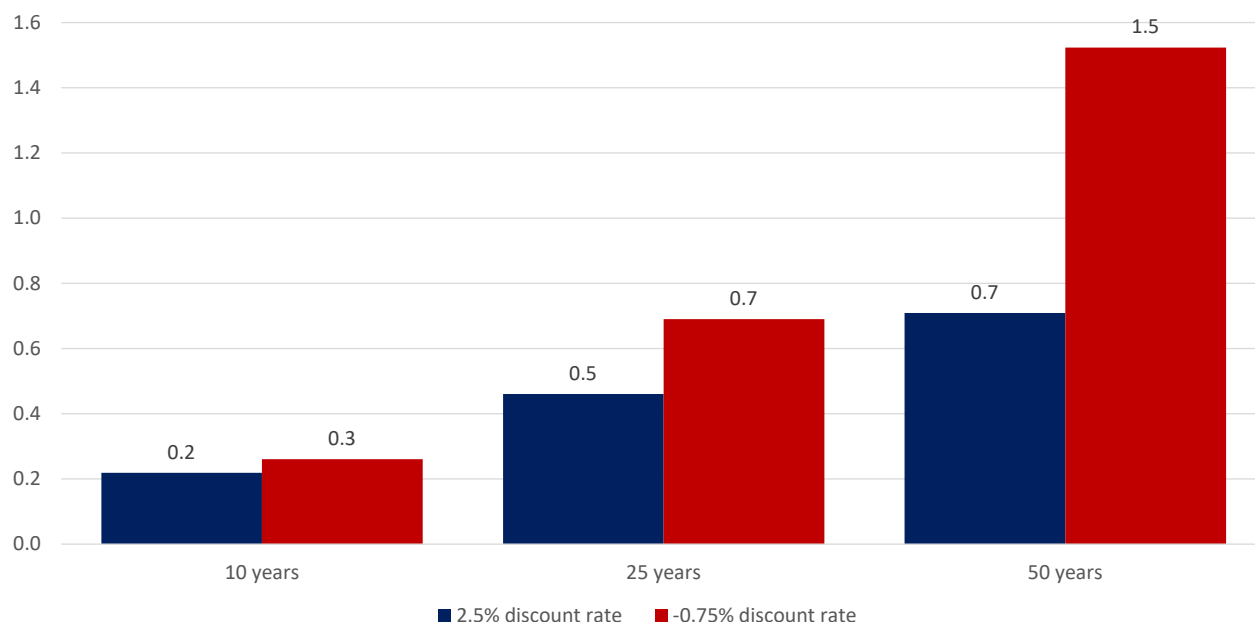
<sup>29</sup> The Actuary, *GI: PPOs – A little goes a long way* (The Actuary, London)

<sup>30</sup> GIRO Working Party 2010, *Periodic Payment Orders* (GIRO Working Party 2010, London), 2010

<sup>31</sup> Discussions are ongoing for the discount rate on periodical payment orders to be changed. Research has shown that a slight decrease in the discount rate can lead to large revaluations of the capital requirements needed to meet periodical payment orders and hence, if the discount rate is to be lowered, future premiums may rise even more. Ministry of Justice, *Revision to Personal Injury Discount Rate Research* (Ministry of Justice, London), 2013

<sup>32</sup> Ministry of Justice, *New discount rate for personal injury claims announced* (Ministry of Justice, London), 2017

**Figure 24: Net present value of an indicative lump sum award using current and proposed new discount rate for different assumptions of remaining life years if lump sum needed to cover annual award of £25,000 in real terms (£ millions)**



Source: Capital Economics

As a result of the decision, insurers will have to set aside greater reserves and it will increase the annual cost of providing motor insurance. Estimates suggest that the change could push up premiums by between £25 and £75 per policyholder.<sup>33</sup>

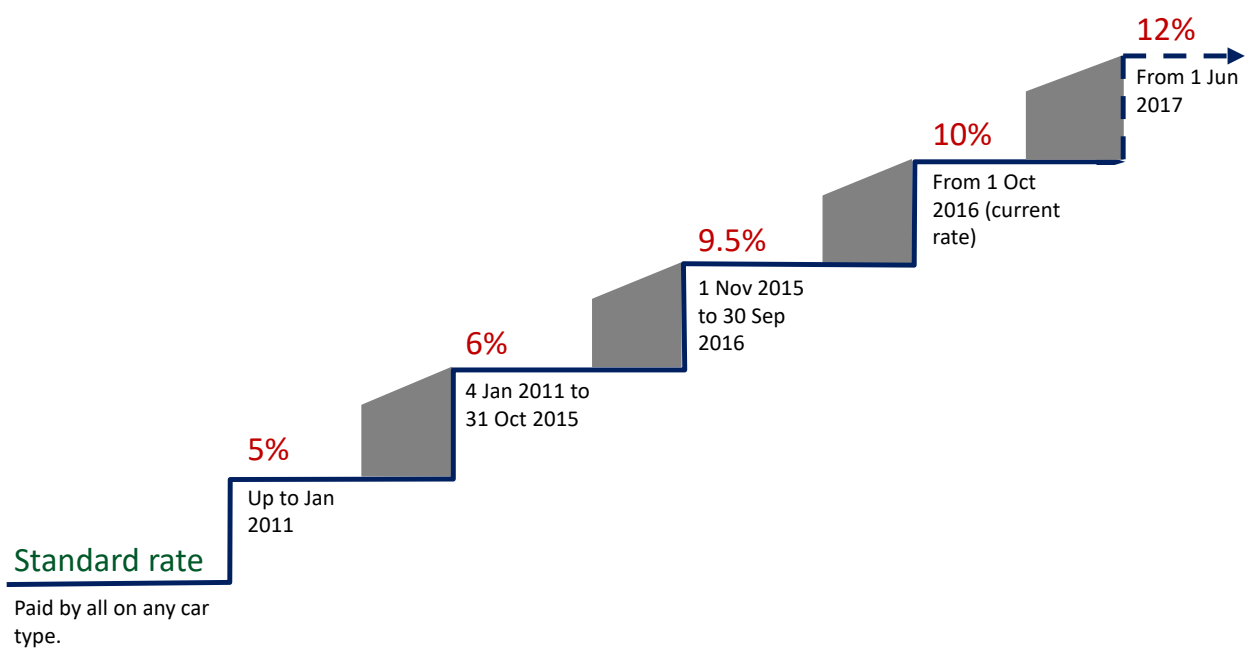
## 2.5 Rising taxes and repair costs

Low or falling interest rates are not the only reason for rising motor insurance premiums. The government has increased the standard rate of insurance premium tax several times in recent years, up from five per cent in 2011 to ten per cent in 2016. In the Autumn Statement in 2016 it was announced that this rate will increase by a further two per cent from 1 June 2017.<sup>34</sup> (See Figure 25 and Figure 26.)

<sup>33</sup> Willis Towers Watson, *Comment on the UK Government's decision to change the discount rate for personal injury damages* (Willis Towers Watson, London), February 2017

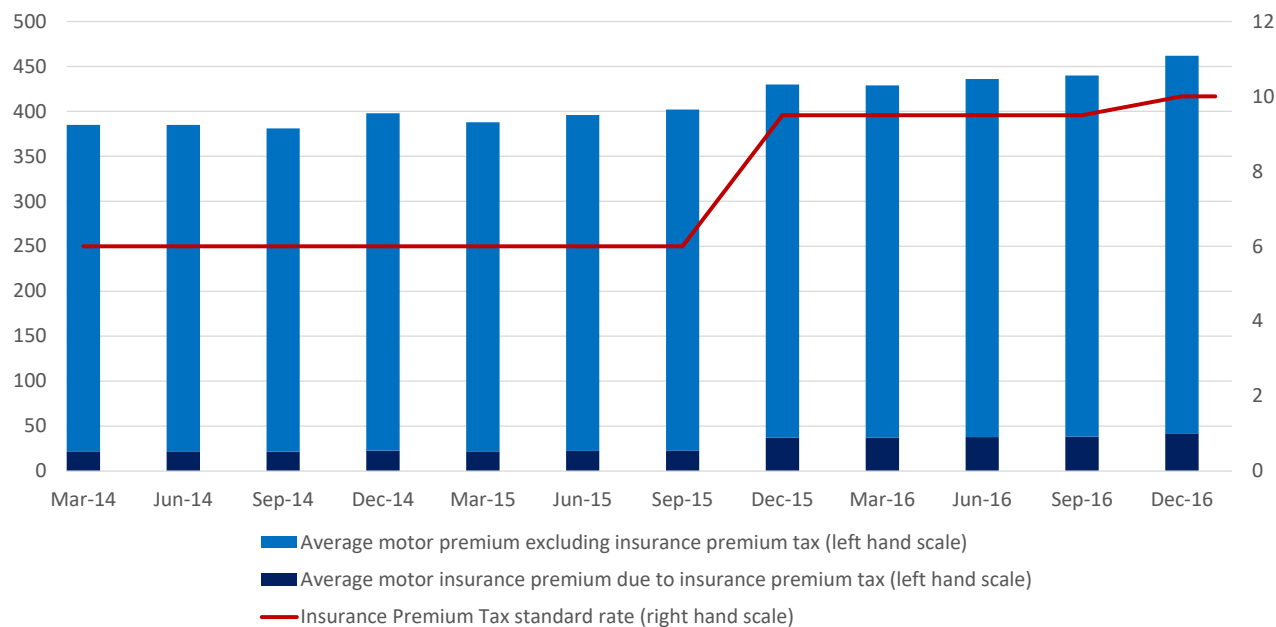
<sup>34</sup> HM Treasury, *Autumn Statement 2016* (HM Treasury, London), November 2016

Figure 25: Standard rate of insurance premium tax since 2011



Sources: Capital Economics and HM Revenue and Customs. Note: There is a 'Higher rate' of insurance premium tax. This is paid by those who sell motor cars, light vans or motorcycles and car hire companies who require coverage for multiple drivers. This has been 20 per cent since 4 January 2011.

Figure 26: Average motor premiums (quarterly, pounds) and insurance premium tax rate (per cent)



Sources: Capital Economics and Association of British Insurers, *Motor insurance premiums reach highest recorded levels* (Association of British Insurers, London), 2017. This measure of premiums is provided by the Association of British Insurers. Any other charts in the report that show premiums data use data from the Office for National Statistics.



In addition, car repairs have become more costly as cars use more sophisticated technology. Modern day cars contain a substantial number of sensors in places that are vulnerable to impacts. This includes ultrasonic sensors in bumpers.<sup>35</sup>

As a result, repair costs have risen by 32 per cent over 2013 to 2016, or 30 per cent in real terms. This has translated into higher premiums for motorists.<sup>36,37</sup>

## 2.6 Whiplash is not the main driver

The debate on rising motor insurance costs has focused on so-called 'whiplash fraud' but there is little evidence to suggest that personal injury claims are responsible for recent substantial increases in motor insurance premiums.

The insurance industry's own estimates indicate that, after accounting for inflation, the total amount they paid out on what they describe as 'whiplash' or soft tissue injury claims declined by 17 per cent between 2007 and 2016. Over the same period, official statistics suggest that premiums increased by an average of 71 per cent. (See Figure 27.)

<sup>35</sup> D. Revolta, 'Cost of car insurance hits all-time high in UK', *Autocar*, 3 February 2017, <http://www.autocar.co.uk/car-news/industry/cost-car-insurance-hits-all-time-high-uk>, (accessed 6 March 2017)

<sup>36</sup> Association of British Insurers, *Motor insurance premiums reach highest recorded levels* (Association of British Insurers, London), 2017. Real change in repair costs calculated by Capital Economics using consumer price index.

<sup>37</sup> R. Oliver, 'LV warns that high-tech cars will push up claims costs', *The Financial Times*, 19 September 2016, <https://www.ft.com/content/29d0caee-7e7c-11e6-bc52-0c7211ef3198>, (accessed 3 March 2017)

**Figure 27: Motor insurance claims, 'whiplash' pay-outs, premiums, 'whiplash' claims volumes, licensed vehicles and road traffic**

	2007	2011	2016	2007-2016 Change	2011-2016 Change
<b>Motor cases registered to the Compensation Recovery Unit</b>	<b>551,905</b>	<b>828,489</b>	<b>770,791</b>	<b>40 per cent increase</b>	<b>7 per cent decrease</b>
Source	Department for Work and Pensions, <i>Compensation Recovery Unit Performance Statistics</i> (Department for Work and Pension, London), 2013	Department for Work and Pensions, <i>Transparency data Number of cases registered to CRU</i> (Department for Work and Pension, London), 2017	Department for Work and Pensions, <i>Transparency data Number of cases registered to CRU</i> (Department for Work and Pension, London), 2017		
<b>Real value of 'whiplash' pay-outs (2016 prices)</b>	<b>£2.4 billion</b>	<b>£2.5 billion</b>	<b>£2.0 billion</b>	<b>17 per cent decrease</b>	<b>20 per cent decrease</b>
Source	Association of British Insurers, <i>Tackling Whiplash Prevention, Care, Compensation</i> (Association of British Insurers, London), 2008	House of Commons Transport Committee, <i>Cost of motor insurance: whiplash, Fourth Report of Session 2013–14, Volume I</i> (The Stationery Office, London), 2013 and House of Commons Transport Committee, <i>Supplementary written evidence from the Association of British Insurers (ABI) (WL 43A)</i> (The Stationery Office, London), 2013	Ministry of Justice, <i>Reforming the Soft Tissue Injury ('whiplash') Claims Process</i> (Ministry of Justice, London), 2016		
<b>Real cost of car insurance (2016 prices, 2007=100)</b>	<b>100.0</b>	<b>158.5</b>	<b>171.5</b>	<b>71 per cent increase</b>	<b>8 per cent increase</b>
Source	Office for National Statistics, Capital Economics	Office for National Statistics, Capital Economics	Office for National Statistics, Capital Economics		
<b>'Whiplash' claims volumes</b>	<b>-</b>	<b>740,000</b>	<b>690,000</b>	<b>-</b>	<b>7 per cent decrease</b>
Source		HC Deb 14 December 2015 c 19720W	HC Deb 14 December 2015 c 19720W		
<b>Licensed vehicles (thousands)</b>	<b>33,651</b>	<b>34,229</b>	<b>37,368*</b>	<b>11 per cent increase</b>	<b>9 per cent increase</b>
Source	Department for Transport Statistics	Department for Transport Statistics	Department for Transport Statistics. *Latest data is for end of Q3 2016.		
<b>Road traffic (billion vehicle kilometres, all motor vehicles)</b>	<b>505.4</b>	<b>488.9</b>	<b>515.9</b>	<b>2 per cent increase</b>	<b>6 per cent increase</b>
Source	Department for Transport Statistics	Department for Transport Statistics	Department for Transport Statistics		

Notes: Data for motor cases registered to the Compensation Recovery Unit refer to the reporting period 2007/08 and 2011/12. The real value of whiplash pay-outs and cost of car insurance has been calculated using the consumer price index for insurance connected with transport. Car insurance held a 93 per cent weight in this index in 2015 according to a reply to a freedom of information request by the Office for National Statistics (Request number 004256 from 17 June 2015). Real value of whiplash pay-outs for 2016 are insurance industry estimates for road traffic accident related soft tissue injury claims. Number of motor cases registered to the Compensation Recovery Unit relate to all personal injury claims resulting from a road traffic accident, including but not limited to soft tissue injuries such as whiplash.

## 3 PROPOSALS AND INSURERS' PROFITS

In this section, we evaluate whether or not the government's proposals are likely to deliver a reduction in the price of motor insurance premiums. First, we identify the Ministry of Justice's assumptions. Second, we consider how competition affects firms' ability to pass on cost increases. Third, we analyse the likelihood that firms pass on cost reductions. Fourth, we assess the implications of the government's proposals for the price of insurance premiums and insurers' profits. Fifth, we highlight the conclusions of this report.

### 3.1 Ministry of Justice's analysis of competition and cost pass-through

The main rationale behind the government's proposals to reform the soft tissue injury claims process is to reduce the price of motor insurance premiums for consumers.<sup>38</sup> These have, as shown in Chapter 2, risen sharply in recent years. Motor insurance premiums will only be reduced if the proposals deliver savings for the insurance industry and if these savings are then passed onto consumers.

The Ministry of Justice has assumed that the motor insurance industry is competitive on price and that insurers will have to pass on savings to consumers or they will be priced out of the market. Assuming the market is competitive implies that firms are price takers, they cannot earn economic profits persistently in the long-run and any firm selling above the market price will not make any sales. Therefore, if the cost of production falls, every firm will have to lower prices accordingly otherwise they will not make any sales.

The Ministry of Justice assume that 85 per cent of insurance industry cost savings will pass through as lower premiums.<sup>39</sup> This is based on previous analysis by the Competition and Markets Authority, which is only weakly related to the specifics of these proposed reforms.<sup>40</sup> This analysis looked at pass-through rates for additional costs or additional revenues, rather than cost reductions specifically. What's more, the 80 to 90 per cent pass through rates were sensitivity tests (or 'what-if' analyses) rather than the main assumption.

<sup>38</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

<sup>39</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

<sup>40</sup> Competition and Markets Authority, *Private motor insurance market investigation Final report* (Competition and Markets Authority, London), 2014

There are good reasons to believe that the government’s assumed pass-through rate is excessive and that it would be lower in reality:

- i. Competition in the motor insurance market is materially weaker than the Ministry of Justice has assumed; and
- ii. What goes up doesn’t necessarily come down. It is more likely firms will increase prices than reduce them.

3.2 Competition and the ability of firms to pass on cost increases

The high pass-through rate used in the government’s impact assessment (85 per cent) relies on a weak assumption that the motor insurance is competitive. Economic theory suggests that the level of competition is an important determinant for the ability of a firm to pass-through cost increases to consumers. There is little academic literature on the impact of cost reductions for pass-through rates though. Most academic material is largely about the impact on consumers of increases in tax (incidence of tax) and currency devaluations (import inflation).

A high pass-through rate requires a highly competitive market. If this assumption is relaxed, and consumers are served by few firms, or just one, the pass-through rate from a cost increase would be substantially reduced. (See Figure 28.)

Figure 28: Academic literature analysing theoretical pass-through rates under different levels of competition

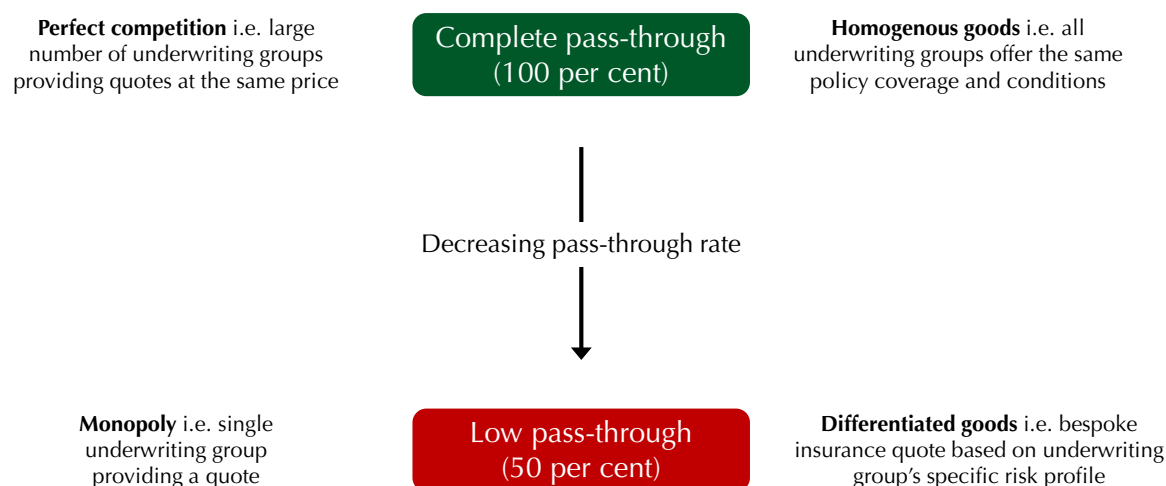
Paper	Findings
Jeremy Bulow and Paul Pfleiderer, ‘A Note on the Effect of Cost Changes on Prices [Measurement of Monopoly Behaviour: An Application to the Cigarette Industry]’, Journal of Political Economy, Vol. 91, issue 1, 1983, pp. 182-185	<ul style="list-style-type: none"><li>• A monopolist facing a linear demand curve and constant marginal cost will always pass through 50 per cent of the change in the level of marginal cost</li><li>• When all competitive firms realise the same change in marginal cost, the industry-specific pass-through is 100 per cent</li></ul>
Paul Zimmerman and Julie Carlson, ‘Competition and cost pass-through in differentiated oligopolies’, Munich Personal RePEc Archive, Paper No. 25931, 2010	<ul style="list-style-type: none"><li>• In the case of monopoly, cost pass-through rate is 50 per cent</li><li>• In the case of perfect competition, pass-through is complete (100 per cent)</li><li>• Under perfectly differentiated output, pass-through is 50 per cent</li><li>• At the other extreme, with homogenous output (all available insurance policies are the same), the pass-through rate is equal to <math>(n/n+1)</math> where ‘n’ is the number of firms in the market</li></ul>

Source: Capital Economics

Economic theory suggests that weaker competition leads to a low pass-through rate. In a market where there is perfect competition (large number of firms and homogenous goods being sold) the pass-through rate would be expected to be 100 per cent. Meanwhile, theory suggests that in a monopolistic market (a single large firm dominates the market and offers a variety of differentiated goods) the pass-through rate would be around 50 per cent. The characteristics of the motor insurance market suggest that the pass through rate for any cost savings resulting from the

government's proposed reforms will be closer to that seen in a monopolistic market. (See Figure 29.)

**Figure 29: Implications of competition for pass-through rates**



Source: Capital Economics

The implications of market structure for pass-through rates suggests that it is highly unlikely that the government's assumed pass-through rate would be achieved in practice. It would require the market to have high levels of competition and for all insurance quotes to be similar in terms of their coverage, terms and conditions. (See Box 2.)

**Box 2: Implications of competition model assumptions for pass-through rates**

The Ministry of Justice has assumed that 85 per cent of savings will be passed through to consumers. Here, we show the implications of applying different models of competition for this pass-through rate:

- We can assume that 20 per cent of the market is served by a single firm. This is a conservative assumption based on the proportion of consumers that let their policies renew automatically each year (23 per cent)
- The theory we have analysed suggests that these consumers will experience a pass-through rate of 50 per cent
- The remaining consumers will need to experience a pass-through rate of 93.75 per cent to achieve the Ministry of Justice's assumption of an average pass-through rate of 85 per cent

Source: Capital Economics

The reason for the 50 per cent pass-through rate under a monopoly is that a monopolistic firm can increase prices, or not pass on cost savings, and still keep many of its customers, purely because

they are prepared to pay any price if they need the product. However, customers will be pushed away once the price is pushed above their reservation price i.e. the maximum price they are willing to pay for the good. This is only possible though if the purchase of the good or service is voluntary.

Purchasing motor insurance is compulsory for using a car on public roads in the United Kingdom. As such, despite the British motor insurance market resembling more of an oligopolistic market, the pass-through rate can be assumed to be even less than that suggested by academic literature under monopolistic competition. Indeed, the pass-through rate in the British motor insurance market is probably closer to zero. Firms don't need to pass lower costs on to consumers as they won't lose customers if they choose to retain any cost savings. Instead, any cost savings will boost their profit margins.

The government's impact assessment document, which accompanies the consultation, outlines that only two motor insurers in the United Kingdom, Aviva and Liverpool Victoria (LV=), have pledged to pass on any cost savings of the government's whiplash reforms to consumers and they have not explained how they will do so.<sup>41</sup> What's more, while previous reforms have led to large savings for insurers, the industry has not demonstrated that they have passed these on to consumers.<sup>42, 43</sup> The industry's market structure is such that, without a formal mechanism to guarantee the pass-through of any savings, the government is unlikely to achieve a reduction in premiums for motorists.

### 3.3 Likelihood of firms passing on cost reductions to consumers

The government's 85 per cent pass-through assumption is based on analysis that examined what the pass-through rate for additional costs or additional revenues might be. Looking specifically at the likely impact of cost reductions, evidence from other industries suggests that firms do not respond to cost decreases in the same way that they do to cost increases. It is more likely that a firm will increase prices than decrease them.

There is a body of empirical evidence that shows output prices tend to respond faster to input cost increases than to decreases. This tendency has been found in more than two or every three markets examined.<sup>44</sup> The asymmetric response to cost shocks is substantial and durable in both producer goods markets and consumer goods markets. This finding is robust across markets that are perfectly competitive and those with significant industry concentration (market power). It has

<sup>41</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

<sup>42</sup> Access to Justice, *Reforming the soft tissue injury (whiplash) claims process A response by Access to Justice (A2J)* (Access to Justice, London), 2017

<sup>43</sup> Association of British Insurers, *Insurers have passed on £1.1billion savings to motorists but climbing personal injury claims are pushing premiums higher* (Association of British Insurers, London), 2015

<sup>44</sup> Sam Peltzman, 'Prices Rise Faster than They Fall', *The Journal of Political Economy*, Vol. 108, No. 3, June 2000, pp. 466-502

been found across multiple markets, such as for fuel, bank deposit rates and various agricultural products.

While it would have been likely that insurers would have passed on a significant proportion of a cost increase, perhaps in the region of 50 to 70 per cent, it is unlikely that any cost reductions that result from the proposed reforms would be passed on to the same degree.

### 3.4 Consequences for insurers' profits

The reality is that the proposed reforms would deliver a material boost to insurers' profits.

The Ministry of Justice's impact assessment estimates that, under its preferred set of policies, the insurance industry will save around £1.3 billion per annum, of which around £1.1 billion will be passed on to consumers, providing a £200 million boost to insurers' profits.<sup>45</sup> This is calculated using the implausibly high pass-through rate of 85 per cent. On more realistic pass-through rate assumptions, insurers' profits will increase by between £400 million and £670 million.<sup>46</sup>

This analysis has so far ignored the potential for reduced staffing costs at insurance firms. The Ministry of Justice has estimated that there would be a 24 per cent fall in the number of settled road traffic accident claims each year.<sup>47</sup> This would lead to a material reduction in the insurance industry's administrative requirements for handling and processing claims. We estimate that there may be around 12,300 people employed directly to handle personal injury claims at insurance companies at a cost of £329 million per annum.<sup>48</sup> We take a cautious approach and assume that the proposals will lead to a 20 per cent fall in personal injury related casework employment at insurance companies. This would boost insurers' profits by a further £66 million.

The government does not appear to see the boost to insurers' profits at the cost of consumers as a bad thing, however. Analysis shows that the Ministry of Justice's impact assessment yields a positive result for its preferred policies only because of an increase in insurers' profits, and that consumers and taxpayers are actually worse off.<sup>49</sup>

The proposed reforms are unlikely to achieve the government's stated aims and benefit consumers. Instead, the reforms are likely to boost insurers' profits by between £0.5 billion and £0.7 billion per annum.

<sup>45</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

<sup>46</sup> We calculate this using pass-through rates of 50 per cent and 70 per cent.

<sup>47</sup> Ministry of Justice, *Reforming the Soft Tissue Injury ('whiplash') Claims Process* (Ministry of Justice, London), 2016

<sup>48</sup> Capital Economics, *Economic value of personal injury claims specialists* (Capital Economics, London), 2017. Note: this covers gross salary costs and employer's national insurance contribution.

<sup>49</sup> Justin Coombs, Alina Goad and Krishna Nandakumar, *Proposed reforms to the soft tissue injury claims process and increase in the small claims court limit* (Compass Lexecon, London), 2016

### 3.5 Conclusions

Overall, while the number of accidents recorded by the police has fallen in recent years, we find that this reflects the reduced likelihood of an incident being reported rather than a decline in the actual number of accidents that have occurred. The decline in the number of police traffic officers over the period is a key contributing factor to this. It is not surprising therefore that personal injury claims have risen as motor vehicle traffic has increased and government legal reforms in the 1990s improved access to justice for victims of road traffic incidents.

Personal injury claims have often been blamed for rising motor insurance premiums in recent years, however it is more likely that low interest rates have been responsible. The insurance business model relies on firms generating investment returns on their reserves and capital. This was broadly effective up until the financial crisis, which resulted in record low interest rates and severely hampered the industry's ability to earn a return.

The government has outlined reforms that it claims will result in material savings for the insurance industry, which will then be passed onto consumers through reduced premiums. However, the industry is not as competitive as has been assumed. The proportion of any savings that would be passed on is likely to be materially lower than is needed for the reforms to achieve the government's stated aims and benefit consumers. The reality is that, instead of resulting in a material reduction in premiums for motorists, the reforms would boost insurers' profits by between £0.5 billion and £0.7 billion per annum.