Institute and Faculty of Actuaries

GIRO50 Conference 2023

1–3 November, EICC Edinburgh

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Update from the Third Party Working Party

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This handout supports the research effort of the Institute and Faculty of Actuaries Third Party Working Party and is not written advice directed at the particular facts and circumstances of any given situation and/or data.

The materials contained in this presentation pack and any oral representation of it by the working party are explicitly outside the scope of the TAS.

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Third Party Working Party

- Fourteenth iteration of the Institute and Faculty of Actuaries Third Party Working Party (TPWP), which investigates motor claims (injury and property damage).
- Scope focused on private car comprehensive (PCC) and includes accidental damage analysis for the third year.
- Data representing earned premium for accident year 2022 of £7.6 billion for private car comprehensive.
- This pack contains this year's research to be presented at the GIRO conference in November 2023.

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Acknowledgements

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Market statistics

Notes on data

- The collection of contributing insurers has changed materially over the years. Relative to last year's study this year's includes additional data from some contributors (generally relating to more accounts) and, in some cases, less data from other contributors.
- In addition, in each year it is common for a number of insurers to make relatively subtle changes to their definitions of claim statistics. In the aggregate, these lead to distortions when comparing the market studies between different years.
- Not all contributors are able to supply data to support every claim statistic in each study. There are generally (but not always) improvements in the availability of data from year to year, and as such, the results of the most recent study will be based upon data from an increased proportion of the contributor companies (and not just new contributors). Again, this introduces a material distortion into any analysis which attempts to compare the results across different studies.
- It is reasonably common for insurers to restate the claims statistics of prior accident years (and prior periods of development), particularly in the case where portfolios (including movements on prior year liabilities) have been acquired or disposed of by the contributor(s) in question. Other reasons for such changes can be changes in the availability of granular data pertaining to (potentially large) segments of portfolios (such as in the case where data is provided by bordereaux rather than being integrated in insurer administration systems) or in some cases changes in the mapping of data to classes.
- **For this reason, we would recommend that if the user of the research wishes to understand how trends have evolved over time, then they should focus on looking at trends by accident year within the latest study, rather than attempting to compare the results across studies. This is particularly true this year where there has been more movement in the data between studies than in previous years.**
- Likewise we do not consider statistically valid any back engineering of individual contributors' contributions.

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1. Market Environment
2. Industry Statistics
   - AD
   - TPPD
   - Capped TPI
   - Excess TPI
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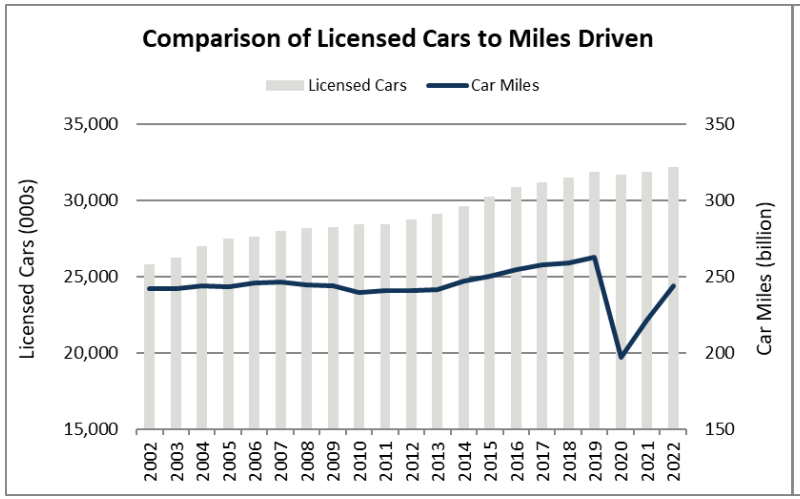
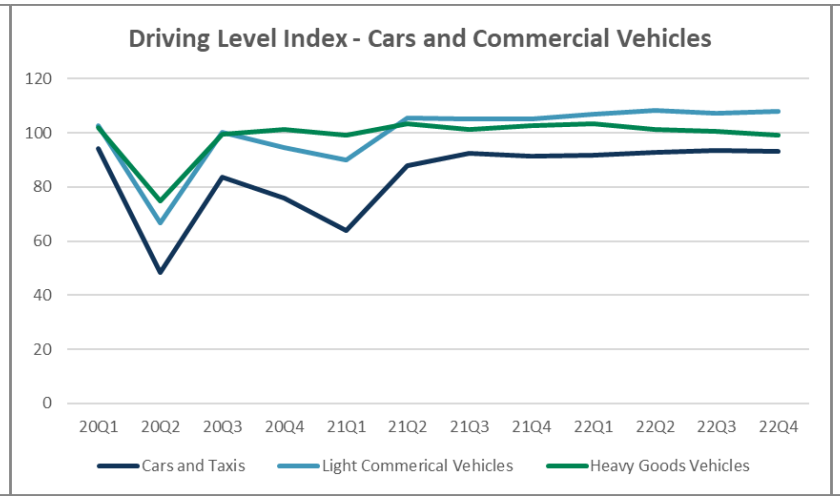
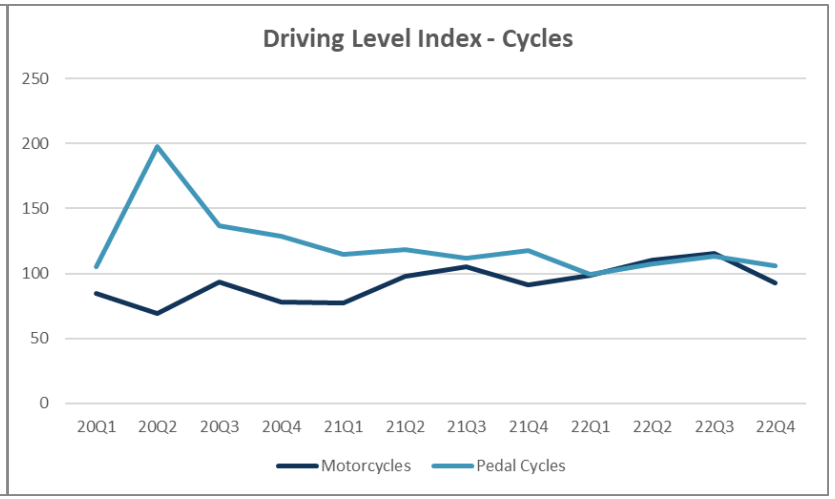
Market Environment

Impact of Covid-19 pandemic on driving levels







- The number of licenced cars increased by 24% between 2002 and 2019 whilst the total number of car miles increased by 8%
- The average miles driven per car reduced by 12% between 2002 and 2019, perhaps related to more households having more than one vehicle
- There was a material reduction in miles driven during the Covid-19 pandemic. In 2022 average car miles remained 8% below 2019 levels.
- Car miles reduced more than commercial vehicle miles during the pandemic. In 2022 light commercial vehicle miles were 8% higher than in 2019
- Government daily driving statistics suggest 2023 driving levels for cars and commercial vehicles are at similar levels to 2022
- There was a significant increase to pedal cycle miles in 2020, with 2021 and 2022 continuing to show higher pedal cycle miles than 2019, particularly outside of the winter months.

Indices presented are relative to the equivalent quarter in 2019

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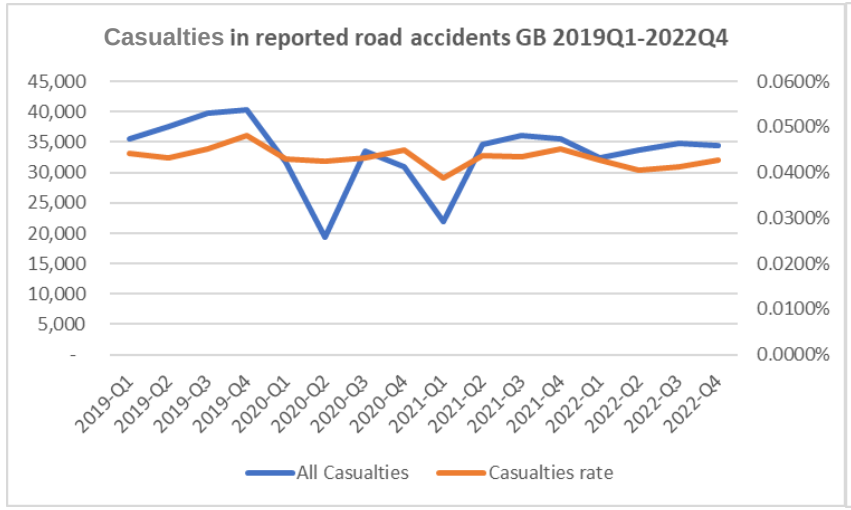
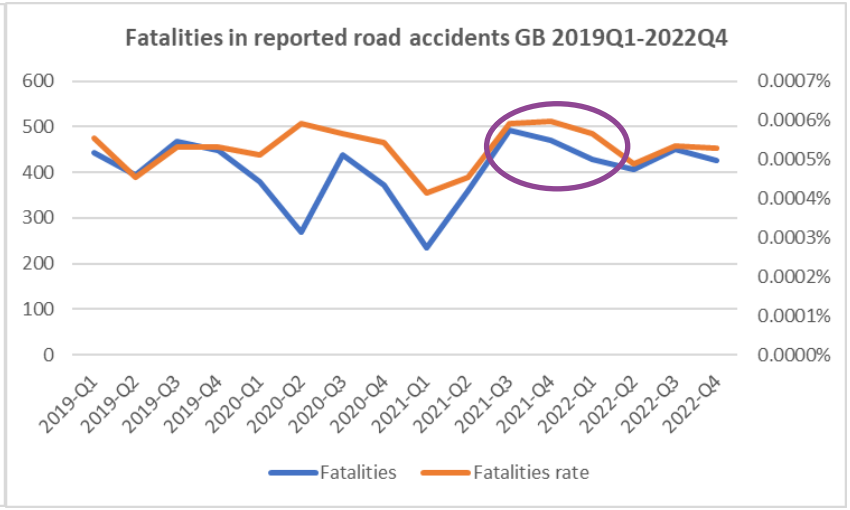
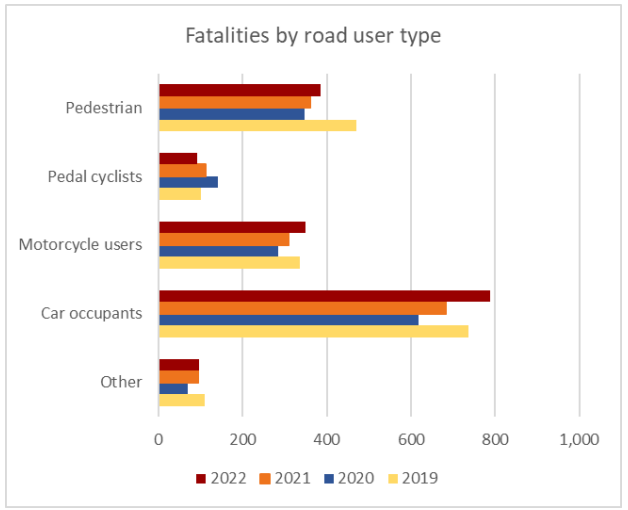
1. Table VEH0101; https://www.gov.uk/government/statistical-data-sets/all-vehicles-veh01;
2. Table TRA2501a; https://www.gov.uk/government/statistical-data-sets/tra25-quarterly-estimates;
3. Table TRA0305b; Road traffic statistics (TRA) - GOV.UK (www.gov.uk)

Market Environment

Casualty, Fatality and Mileage Statistics (per Vehicle Mile)







- There were 1,711 reported road deaths in 2022, an increase of 153 deaths (or 10%) from 2021, but a 41 reduction (or 2%) compared to 2019. There were also 135,480 casualties in reported road traffic accidents, an 6% increase from 2021 but a decrease of 12% compared to 2019.
- The vehicle miles driven was 9% higher in 2022 than in 2021, therefore 2022 still saw the rate of casualties decrease but a slight increase in the rate of fatalities per mile. The increase in fatalities per mile was driven by 2022-Q1 and 2022-Q2, whilst 2021-Q3 and 2021-Q4 rates were 10% and 12% lower than 2021-Q3 and 2021-Q4.
- All road user types saw an increase in the number of fatalities in 2022 with the exception of pedal cyclists which continue to see a decrease since 2020 and saw a 18% reduction in fatalities compared to 2021.

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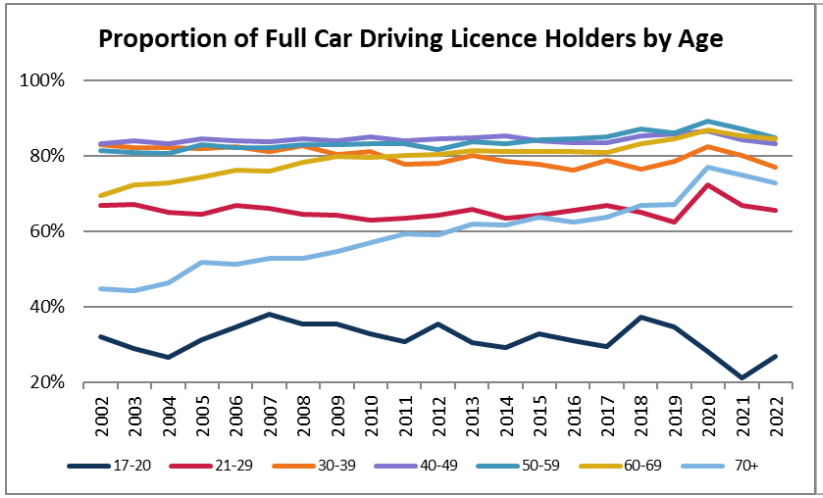
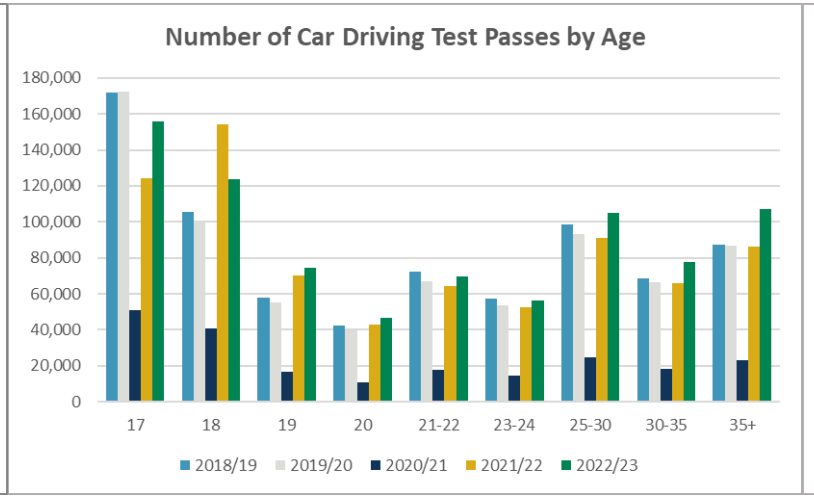
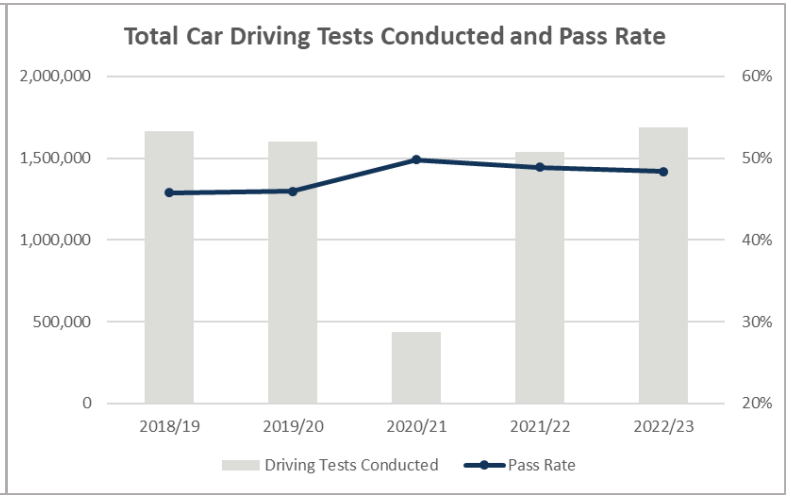
Source: Reported road casualties by road user type and severity, Great Britain 2009 – 2022
TRA2502b - Road traffic (vehicle miles) by road class in Great Britain, quarterly

Market Environment

Changing driving habits







- National Travel Survey data was used to provide a view of the trends in the proportion of full car driving licences held.
- The proportion of those aged 70+ with a full car licence had been steadily increasing prior to the Covid-19 pandemic, with an apparent uptick from 2020.
- The proportion of 17-20 year olds with a full car licence shows a significant reduction following several suspensions to driving tests during the pandemic, with 2022 still below the pre-pandemic proportion
- Driving test data shows that the number of 17 year olds passing their test has almost returned to pre-pandemic levels in the year to March 2022, with 18 and 19 year old passes remaining higher than pre-pandemic
- Total tests conducted have returned to pre-pandemic levels, with the pass rate remaining higher than pre-pandemic. However, there has been no catch-up for the tests not taken in 2021 meaning a large backlog remains.

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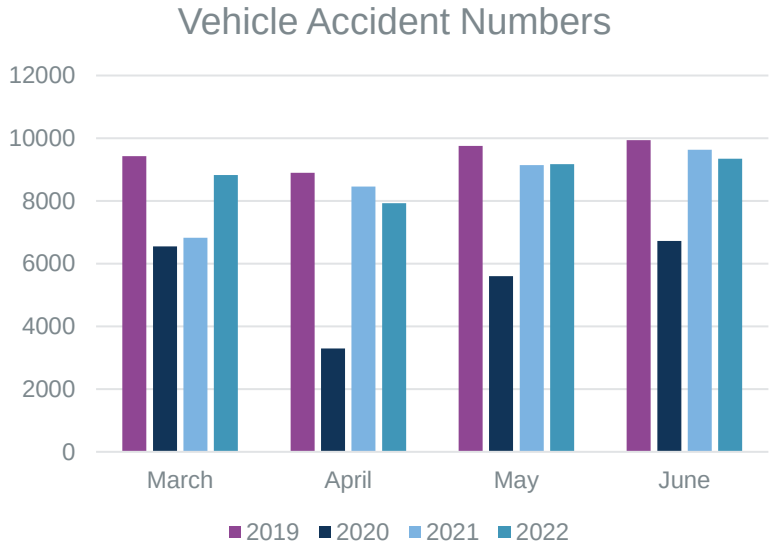
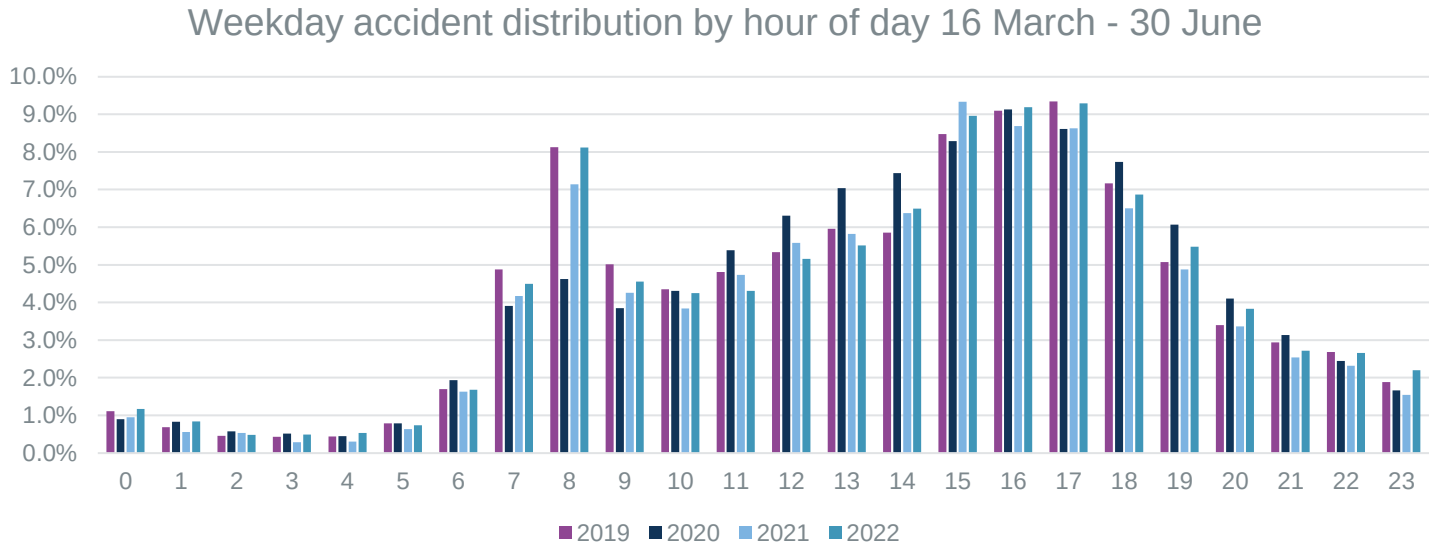
Sources: 1. Table NTS0201; https://www.gov.uk/government/statistical-data-sets/nts02-driving-licence-holders;
2. Table DRT1203; https://www.gov.uk/government/statistical-data-sets/driving-test-statistics-drt#car-driving-test-pass-rates-drt02

Market Environment

Accident Numbers





This graphic shows the distribution of accidents during the first lockdown relative to the same period between 2019 and 2022. (The first lockdown was announced on 23rd March 2020, with most businesses allowed to reopen in early July.)

Key observations are:

- Accident numbers in 2022 are c90% of the 2019 levels. The longer term impact of the pandemic could reduce overall accident numbers, perhaps due to the continuation of working from home.
- Proportion of weekday accidents in morning and evening rush hours has returned to pre-pandemic levels.
- Weekend accidents remained broadly similar in distribution throughout the pandemic.

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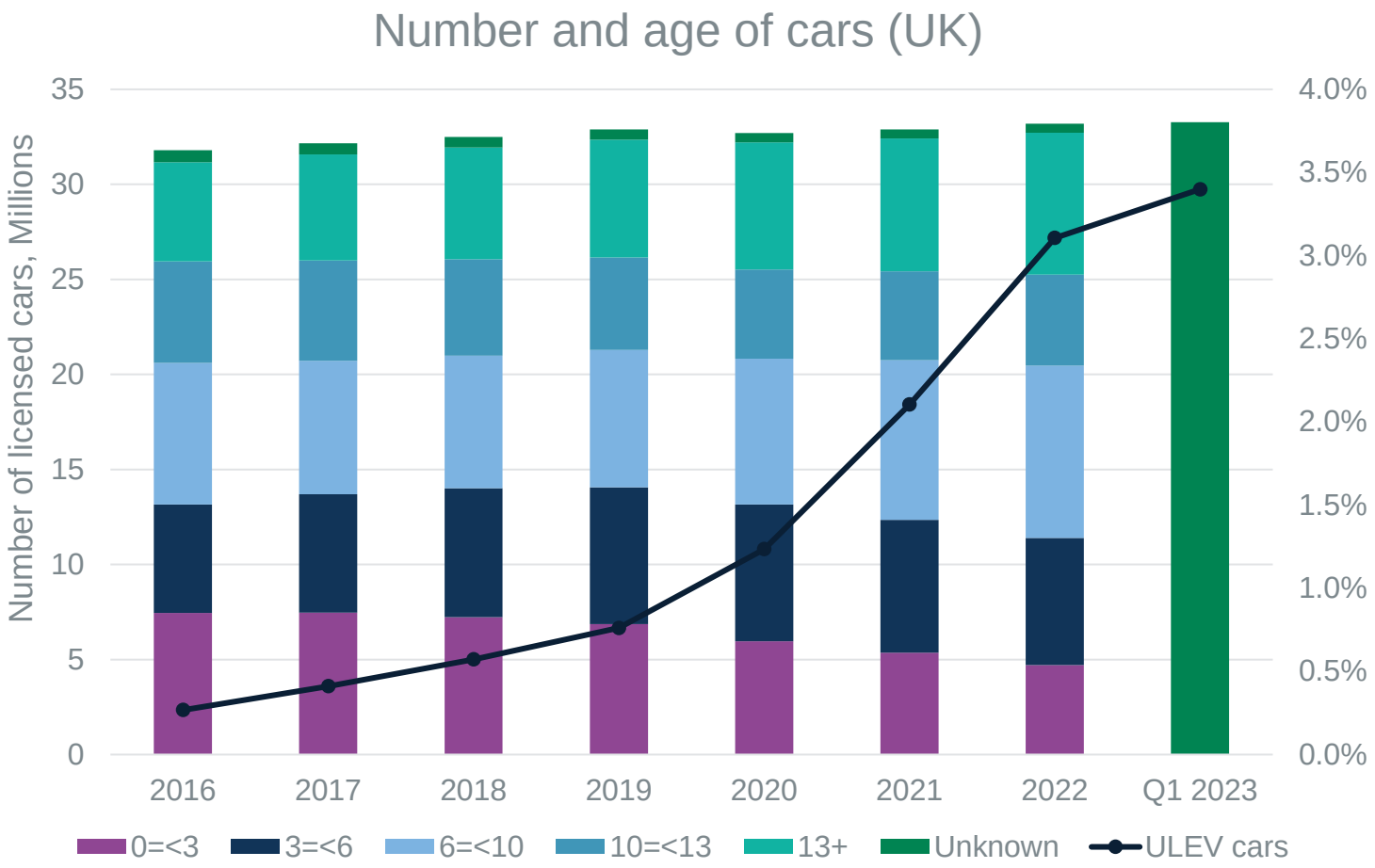
Source: DfT, Road Safety Statistics – Collisions (https://www.data.gov.uk/dataset/cb7ae6f0-4be6-4935-9277-47e5ce24a11f/road-safety-data)

Market Environment

Car Registrations



- The trend towards ULEV (Ultra Low Emission Vehicles) continues to grow - 22% of new car registrations in 2022
- In 2016, c.40,000 ULEV cars were registered compared with c.360,000 in 2022
- In total 1.7m new cars were registered in 2022. Registration levels remain lower than pre-pandemic levels (2.3m in 2019)
- From Q4 2016 to Q2 2022, estimated average car age has increased from 7.9 to 9.1 years.
- New petrol and diesel car ban extended from 2030 to 2035.

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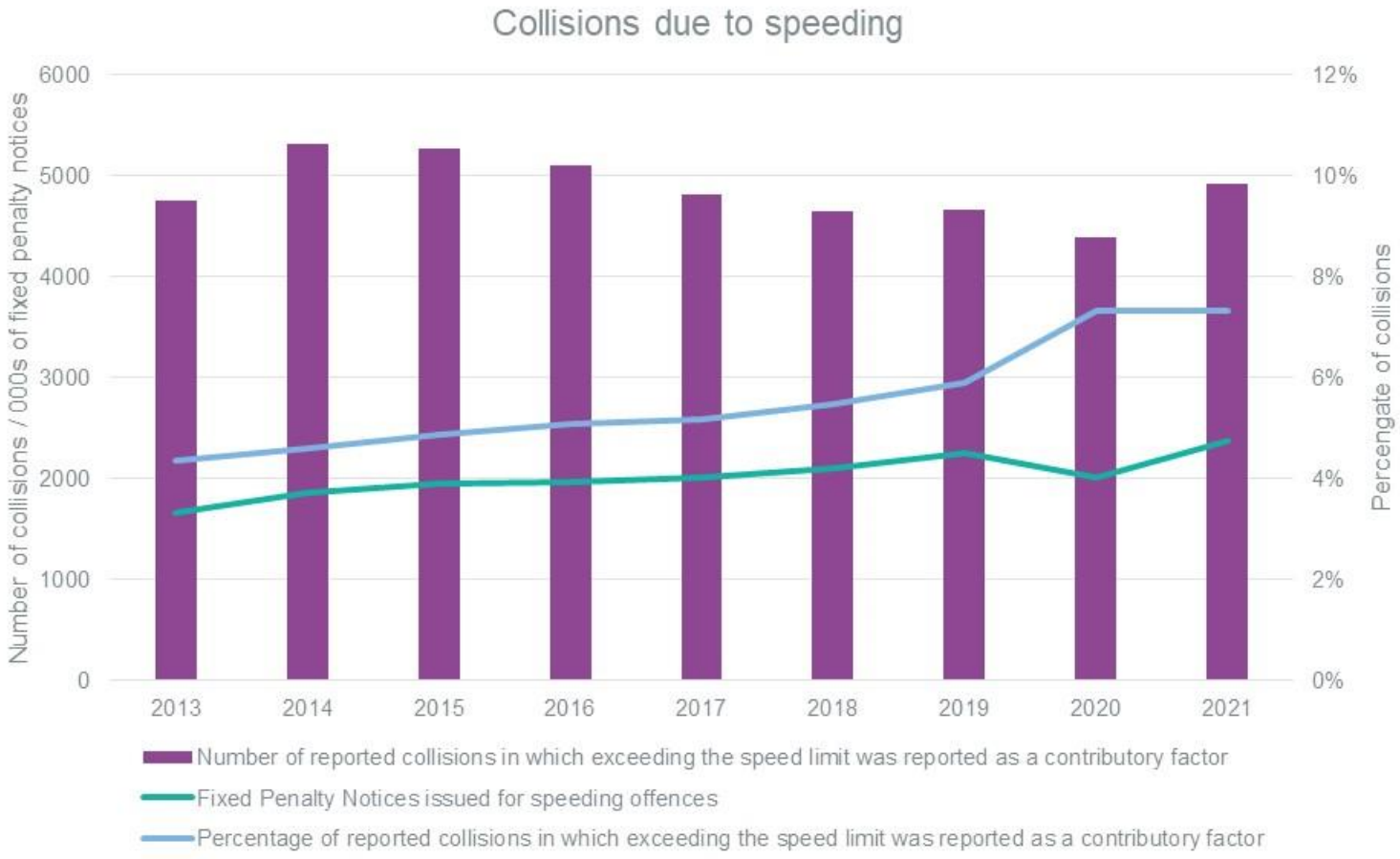
Source: DfT, Vehicle Licensing Statistics *(https://www.gov.uk/government/collections/vehicles-statistics, table VEH1107, VEH0101 VEH0133, VEH0150, VEH0172)*

Market Environment

Speeding



- 7% of collisions were caused by speeding in 2021
- The percentage of collisions caused by speeding has been increasing since 2013
- However, the absolute number of collisions caused by speeding reduced between 2014 and 2020, rising again in 2021
- Speeding offences are also trending upwards, although speeding observed by traffic counters is stable

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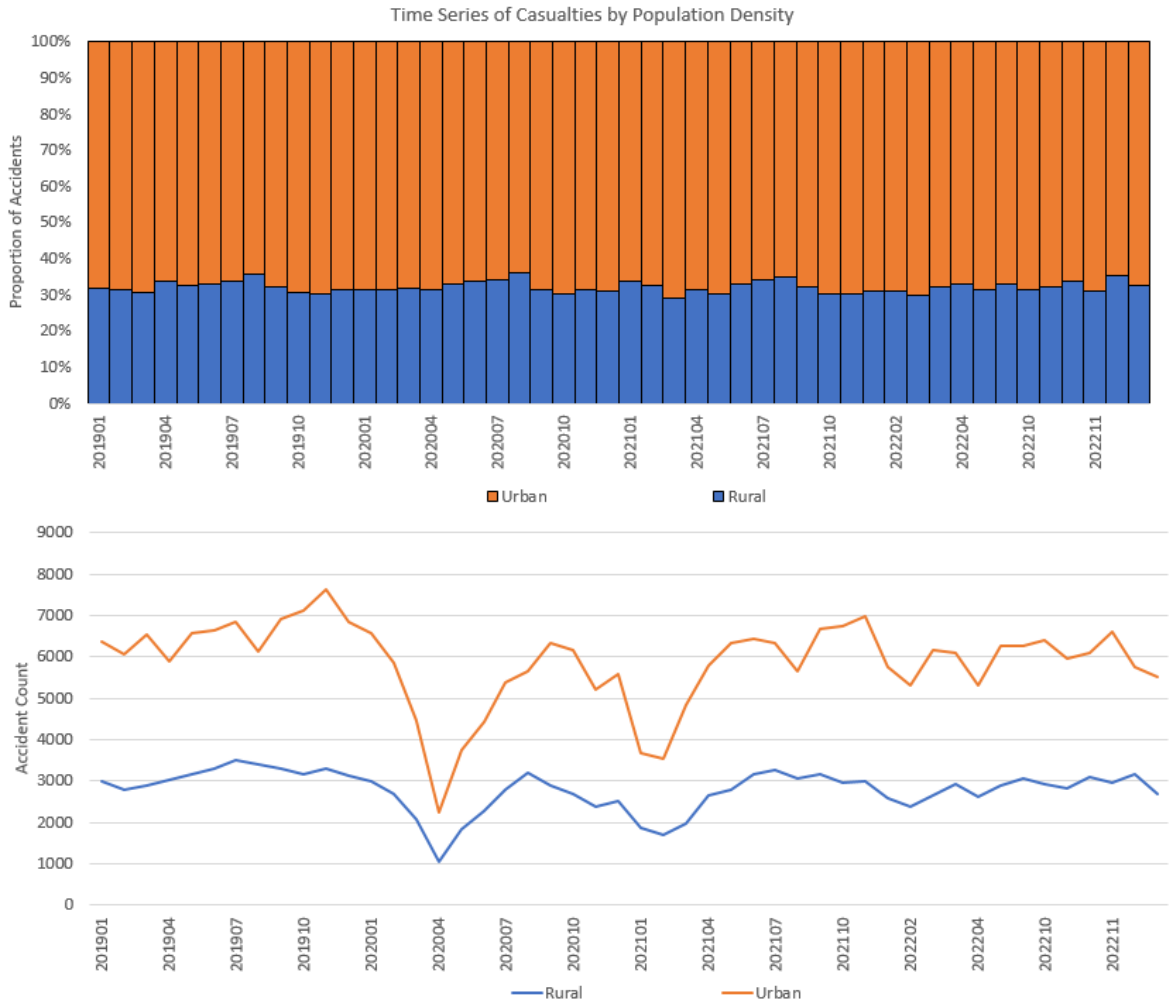
Source: DfT, Vehicle Speed Compliance Statistics *(https://www.gov.uk/government/statistical-data-sets/vehicle-speed-compliance-statistics-data-tables-spe, tables SPE0201, SPE0202)*

Market Environment

Vehicle Accidents by Population Density

- Stats19 data highlights the expected big drop in casualties seen through the lockdowns in 2020 and 2021.
- While this data shows a bigger absolute drop in accidents in urban areas, the proportion of accidents has remains stable geographically.
- This is consistent for different definitions of urban, based on varying the population density threshold.

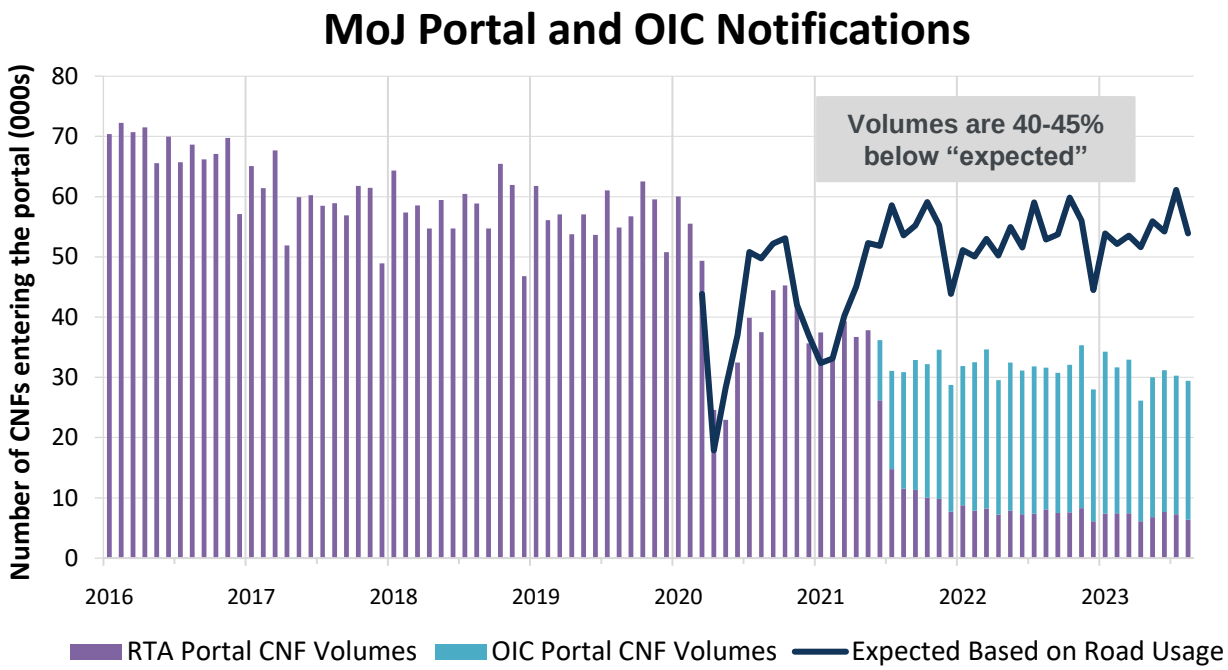


Source: https://www.data.gov.uk/dataset/cb7ae6f0-4be6-4935-9277-47e5ce24a11f/road-safety-data

Market Environment

Ministry of Justice (MoJ) Portal and Official Injury Claim (OIC) Notifications

- Road Traffic Accident (RTA) Claim Notification Forms (CNFs) broadly followed “expected” patterns during Covid lockdowns (based on 2019 RTA volumes following road usage trends, blue line), up until the OIC portal went live in June 2021.
- Since the inception of the OIC portal, RTA volumes have dropped substantially, with OIC notifications building up throughout the second half of 2021.
- Combining both the RTA and OIC portal CNFs, the overall volume remains 45% below 2019 levels due to the impact of the Whiplash Reforms and “New Normal” frequency levels following the pandemic.
- The number of notifications has departed from “expected”, with around 40-45% lower volumes than expected on average. It is uncertain as to the extent to which this is indicative of a genuine fall in frequency following the Reforms versus potential incubation of cases that are yet to be submitted, though there is little evidence of this to date.



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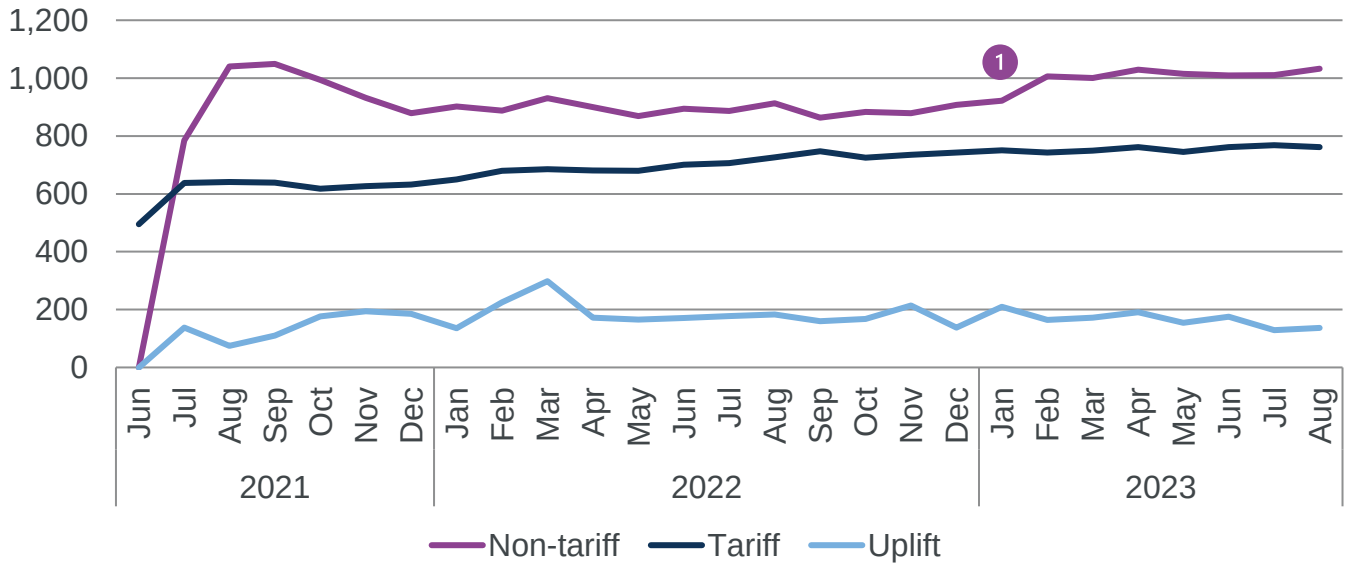
Sources: 1. https://www.claimsportal.org.uk/about/executive-dashboard/ 2. https://www.officialinjuryclaim.org.uk/resources-for-professionals/data/
3. https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic

Market Environment

Whiplash reforms two years on

OICP average settlement



- Non-tariff settlements stepped up from Jan 2023 [1]; now around £1000
- Tariff settlements are gradually increasing towards £800 as claims of longer durations are settled
- Uplift has stabilised at just under £200
  (The Regulations provide for an uplift in damages of up to 20%)
- Uncertainties remain over stable amounts and proportions of each type

Current position

- Frequencies have stabilised to c 40%-45% reduction to overall bodily injury claims
- Uncertainties remain regarding settled severities
  - More complex cases are yet to settle
  - Jan 2023 Court of Appeal (Civil Division) ruling suggests that payouts for mixed injuries will be higher than expected
  - Court rulings on mixed injuries ongoing (ruling from Supreme Court expected in early 2024).

Data from OICP to 31/08/23

- Claims submitted to OICP around 23k pm with 614k since launch; 149k of these now settled (24%)
- The proportion of claims submitted with mixed injuries remain stable at 67%
- 1% of settled claims have exceptional injuries and/or circumstances in contrast to 23% of submitted claims

OICP = Official Injury Claim Portal

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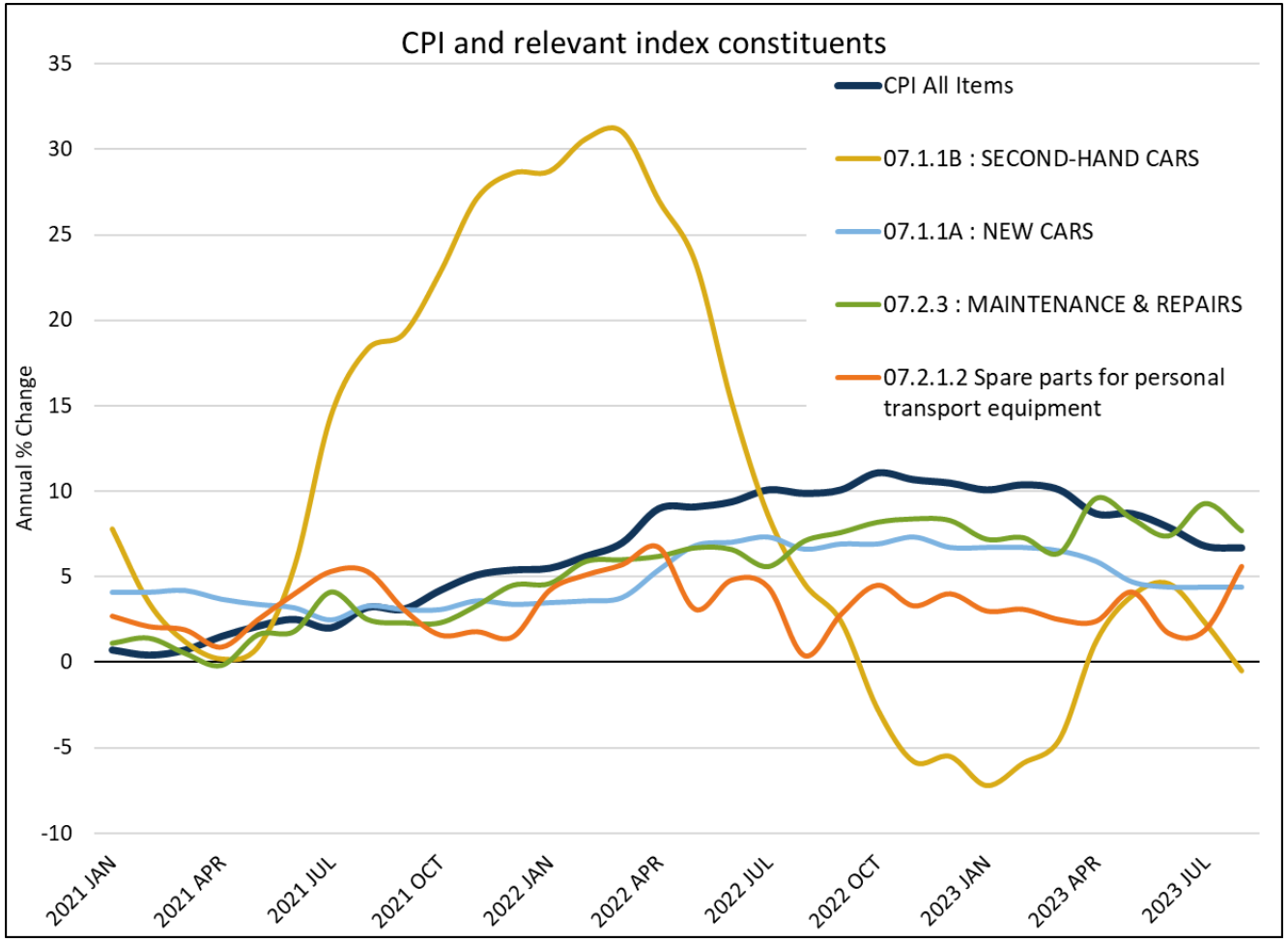
Sources: https://www.officialinjuryclaim.org.uk/resources-for-professionals/data/
https://caselaw.nationalarchives.gov.uk/ewca/civ/2023/19
https://www.dacbeachcroft.com/es/es/articles/2023/january/mixed-injuries-limited-guidance-from-a-divided-court-of-appeal/

Market Environment

Inflation



- CPI falling over 2023.
- Relevant constituents have been below headline level over the last year.
- Second hand vehicle cost increases seen in the wake of covid has abated but the decrease falls short of reversing the elevated cost of replacing vehicles.
- Repair costs: ABP (Auto Body Professionals) standard labour rates increasing in Jul 22 (16%) and again in Jan 23 (25%) to be c.40% above Jan 21 levels. Higher than indicated by CPI constituent.
- Indices on Credit Hire are not readily available. The GTA (General Terms of Agreement) rates for general cars increased by 7.5% in Oct 22 with a further increase of 7.5% recommended in an interim rate review in Jul 23.

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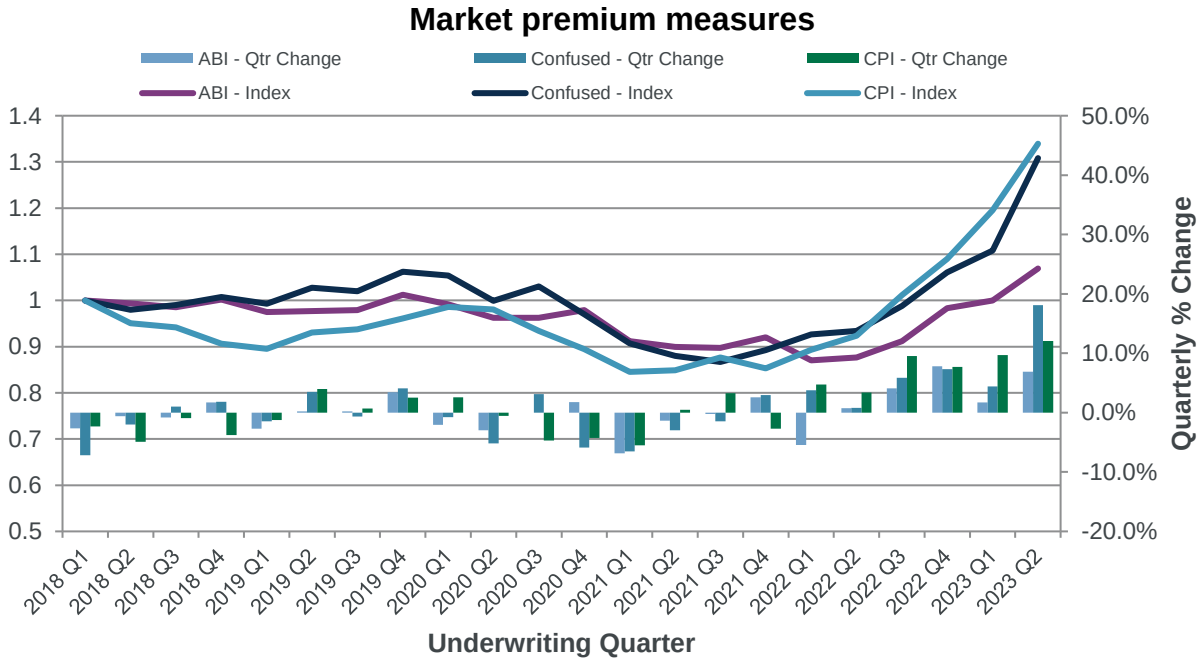
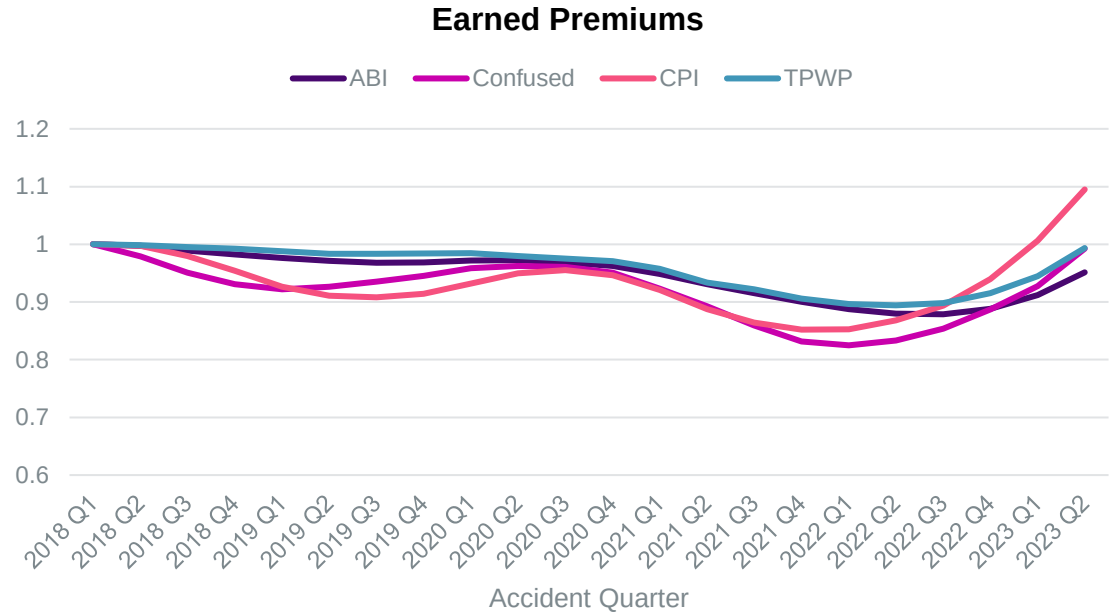
Market Environment

Premium Rates





- All premium measures showing strong increases in premium since 2022 Q2.
- ABI has 2023 Q2 22% higher than 2022 Q2, Confused.com 40% higher and CPI 45% higher.
- On an earned basis 2022 premiums were 4% lower to 1% higher than 2021. 2023 H1 is 5% to 22% higher than 2022 H1.
- ABI data is most consistent with TPWP industry data.

ABI = Association of British Insurers

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Sources: 1. https://www.abi.org.uk/news/news-articles/2023/8/sustained-cost-pressures-on-insurers-push-the-average-price-of-motor-insurance-to-a-record-high/
2. https://www.confused.com/car-insurance/price-index
3. CPIH INDEX 12.5.4.1 Motor vehicle insurance (J2ZI)

Market Environment

Market Commentary

ABI: The **costs of vehicle repairs** leapt by **33%** over the year since Q1 2022 to £1.5 billion, the highest figure since ABI started collecting this data back in 2013…reflects **rising costs**, including **energy inflation**, and more **expensive repairs**.
Increases in labour costs reported up to **40%.**
The cost of **replacement parts** for many popular cars have increased between **12 -21%** over the past year.

EY: The profitability achieved during the pandemic, when car usage and claims were low, was quickly reversed by the impact of **pricing reforms**, high **inflation**, **supply chain** issues and **changing driving habits**. Last year was an undeniably difficult year for the sector and headwinds look set to continue **throughout 2023.**

EY expects **premiums** to **rise sharply** by 16% over 2023 (£74 per policy on average), with a further 11% rise in 2024 (£59 per policy on average).

Key Themes
- Inflationary pressure on claims costs and pricing continue to dominate market commentary on UK Motor
- Insurers note further return of motor claims frequency towards pre-covid levels
- Evidence of more shopping around, potentially due to impacts of cost of living crisis.

Frequency saw an uptick at the end of H1 but remains **10-15% below pre-Covid levels.**

Persistent high inflation continued across markets, remained **higher than the market had anticipated**.

Bodily injury is stable but uncertainty remains.

Shopping levels increased in all markets (+20% UK Motor market NB quotes)

Admiral

- Undiscounted COR strong at 96.3%, but up 1.1pp as **claims frequency trends return to normal levels**, higher reinsurance costs and **inflationary pressures.**

AVIVA

Motor claims: still pressure in the system but trends stabilising; **2023 outlook unchanged**.
Inflation callouts:
- **Repair costs**: single biggest element is labour
- **Second hand vehicle costs**: Broadly stabilised
- **Frequency**: stable as mix benefits offset increase in driver miles

direct line

The claims environment continues to be **uncertain** with claims **inflation remaining at elevated levels** and **further reversion** of Motor **claims frequency** towards **pre-Covid** levels.

esure®

…motor market continues to experience **unusually high claims inflation**. As a result, we have seen **significant prices rises** across the market during H1…
…with more **UK consumers shopping around**, our overall policy count has increased…
The calendar year loss ratio for 30 June 2023 was 63.8% (10.1 percentage points up year-on-year), reflecting **high claims inflation** and an **increase in claims frequencies** as wells as weather events in Q1.

Hastings DIRECT

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Source: ABI News Article, August 2023; EY Press Release, 28 Jun 2023; HY23 Result Reports/Press Release (Admiral, Aviva, Direct Line, esure, Hastings)

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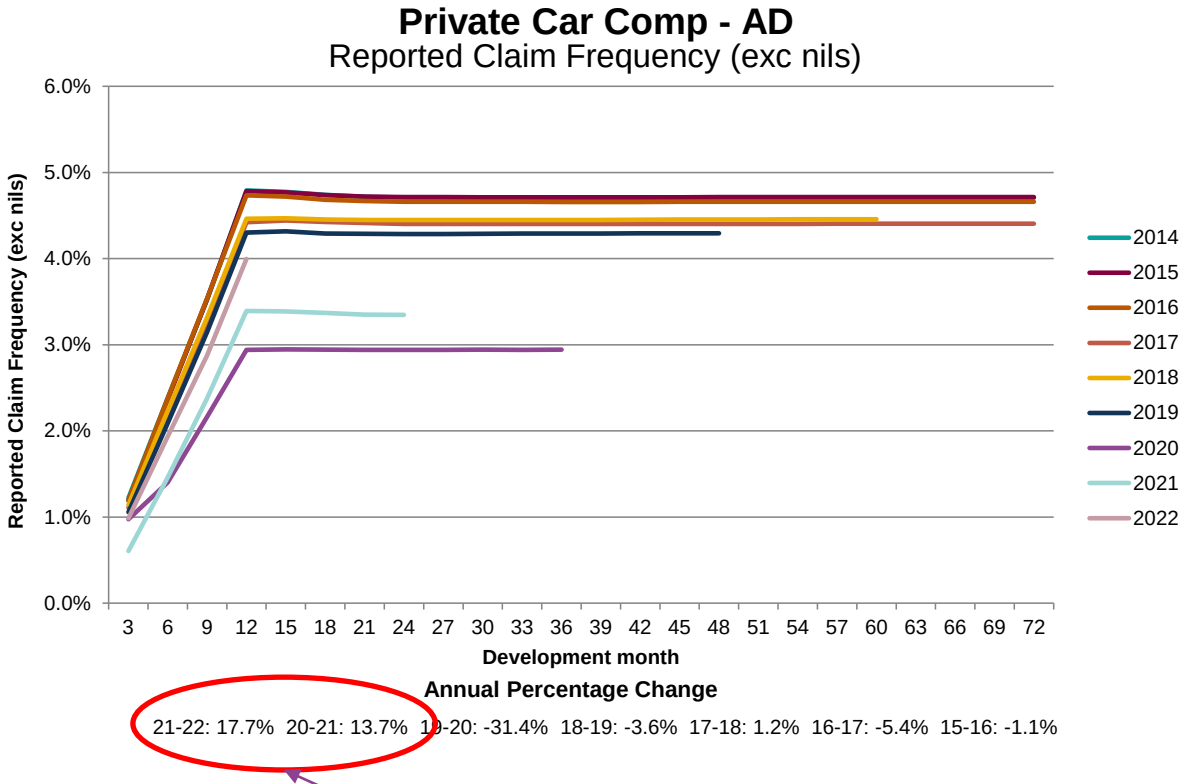
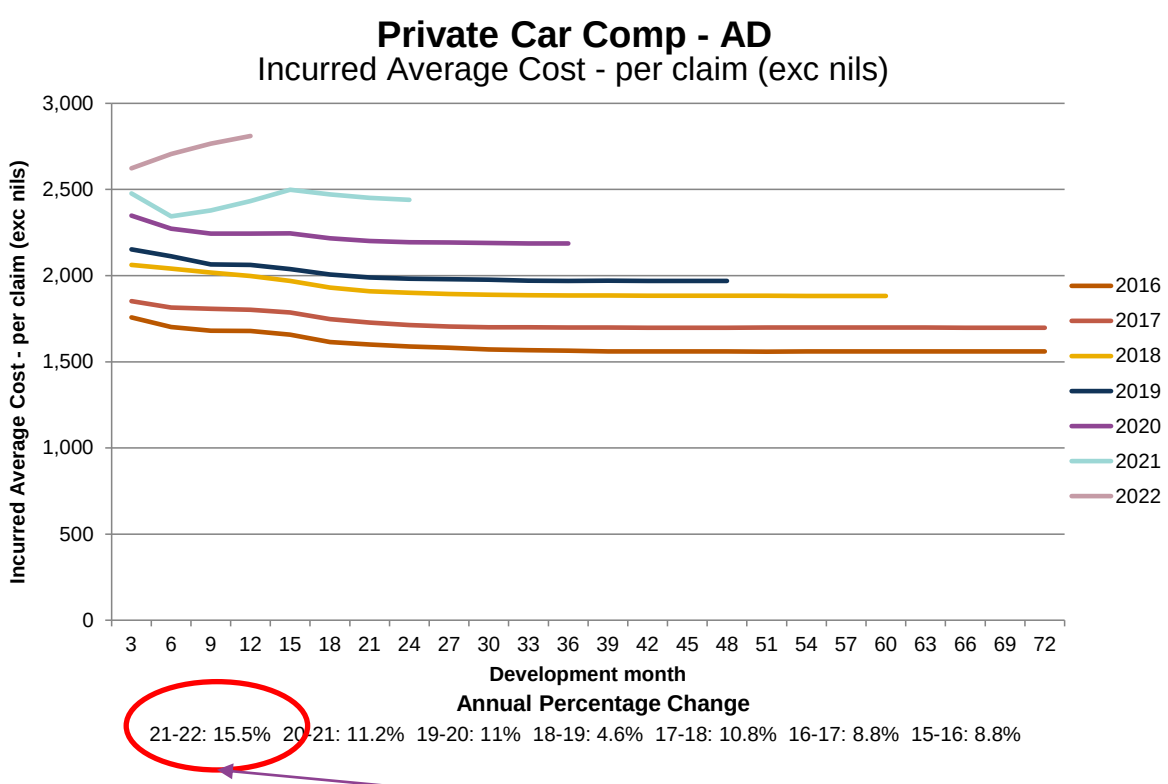
2 November 2023

Industry Statistics - AD

Frequency and Severity YE 2022





2022 frequency up from 2021. 2022 is 7% below 2019 frequency.

Inflation 16% in 2022

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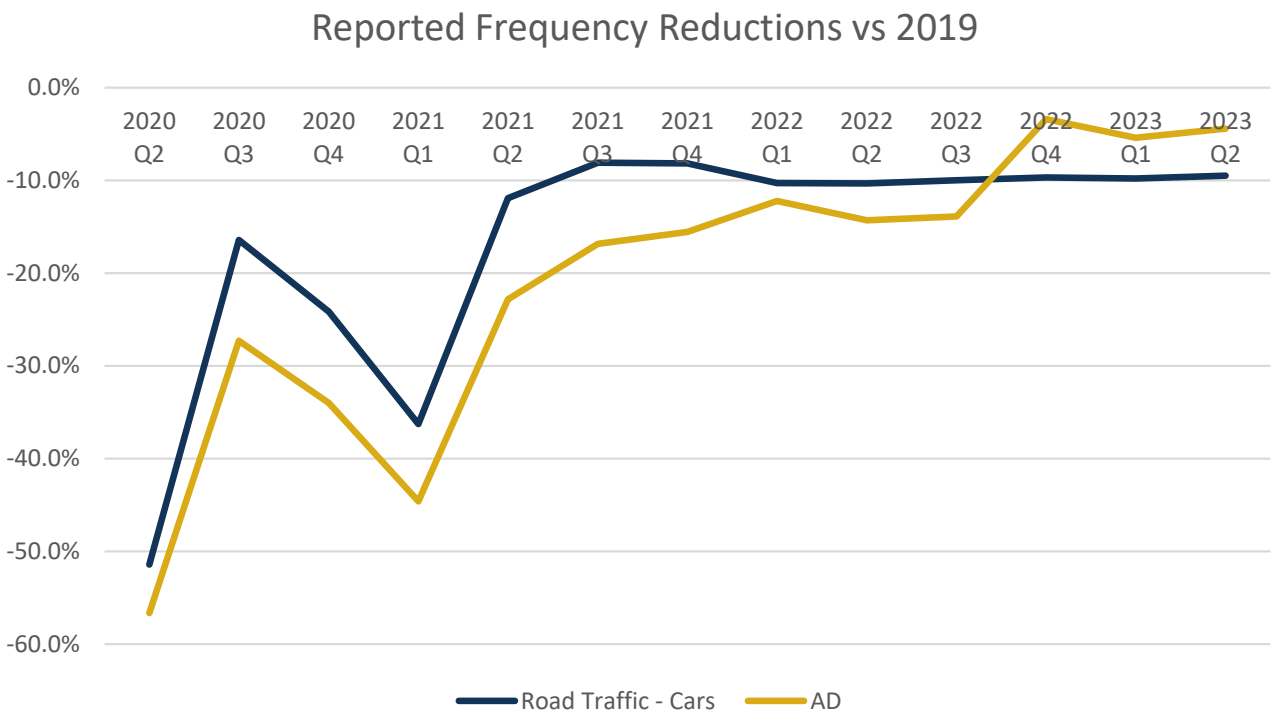
Industry Statistics - AD

Frequency HY2023



Accident Quarter	Change in Car Traffic	Change in AD Frequency
2020 Q2	-51.4%	-56.7%
2020 Q3	-16.4%	-27.3%
2020 Q4	-24.2%	-34.0%
2021 Q1	-36.3%	-44.6%
2021 Q2	-11.9%	-22.8%
2021 Q3	-8.1%	-16.8%
2021 Q4	-8.2%	-15.5%
2022 Q1	-10.3%	-12.2%
2022 Q2	-10.3%	-14.3%
2022 Q3	-10.0%	-13.9%
2022 Q4	-9.7%	-3.4%
2023 Q1	-9.8%	-5.4%
2023 Q2	-9.5%	-4.4%

- Reduction in AD frequency around 10% larger than the reduction in car traffic volumes in 2020 and 2021. In 2022 H1 gap between frequency and traffic volumes has reduced with 2022 Q4 to 2023 Q2 seeing frequency close to 2019 levels.

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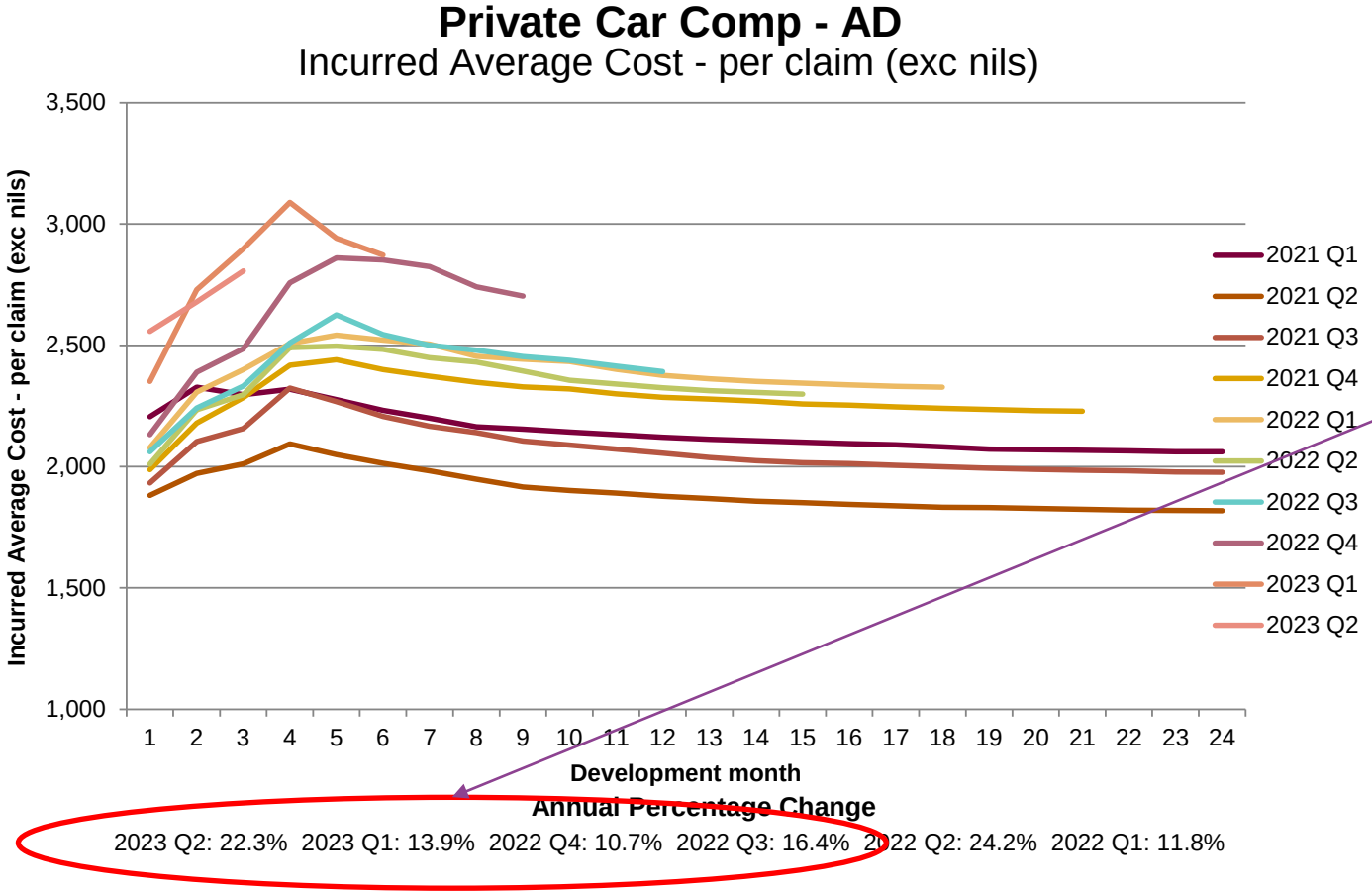
Source : Table TRA2503e; https://www.gov.uk/government/statistical-data-sets/tra25-quarterly-estimates

Industry Statistics - AD

Severity HY2023



Inflation averaging 16% from 2022 Q3 to 2023 Q2.

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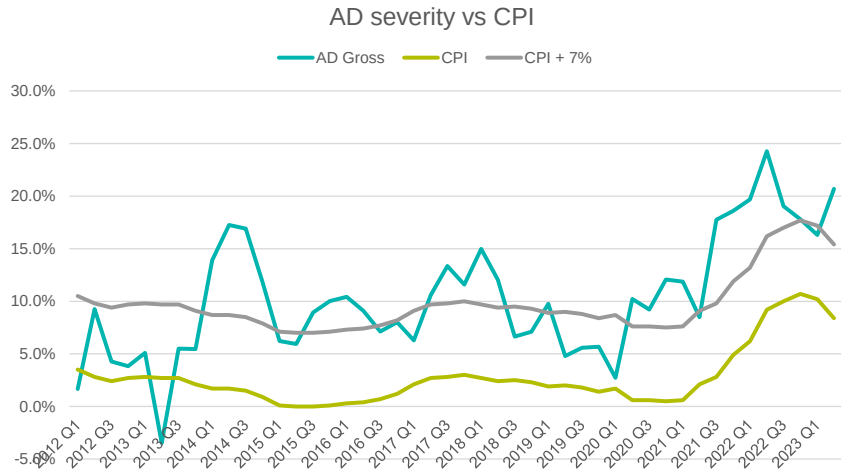
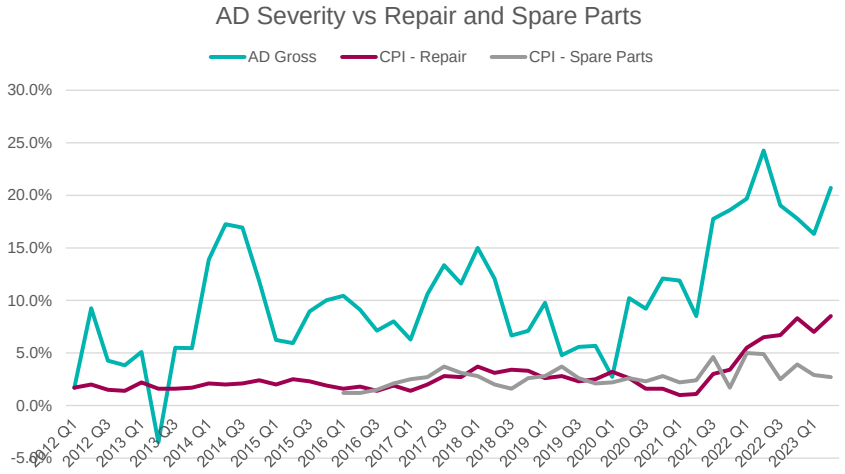
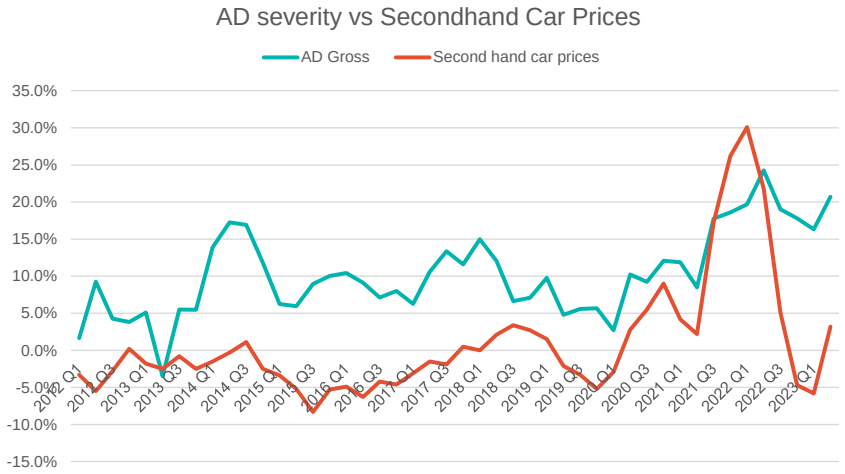
Industry Statistics - AD

Severity HY2023







Methodology

Projection of AD Gross severity excluding nils severity triangle.

Compare accident quarter inflation rates (e.g. 2021 Q4 vs 2020 Q4) against CPI, 'Secondhand Car Prices – CPI', 'Repair – CPI Vehicle Transport and Repair' and 'CPI – Spare Parts'.

A limitation of the analysis is comparing an accident period inflation rate to a calendar period economic inflation measure.

- Projections of AD Gross severity have inflation increasing significantly in 2021 Q3 up and averaging 20% in 2022 and 18.5% in 2023H1.
- Claims inflation was on average 7% higher than CPI from 2012 to 2020.

Correlation between claims inflation and economic indices				
Periods	**CPI**	**Secondhand car prices**	**Repair**	**Spare Parts**
2012-2016	-40%	13%	43%	-58%
2017-2020	20%	42%	5%	29%
2021-2023 Q2	64%	45%	71%	51%
2012-2023 Q2	57%	57%	65%	54%

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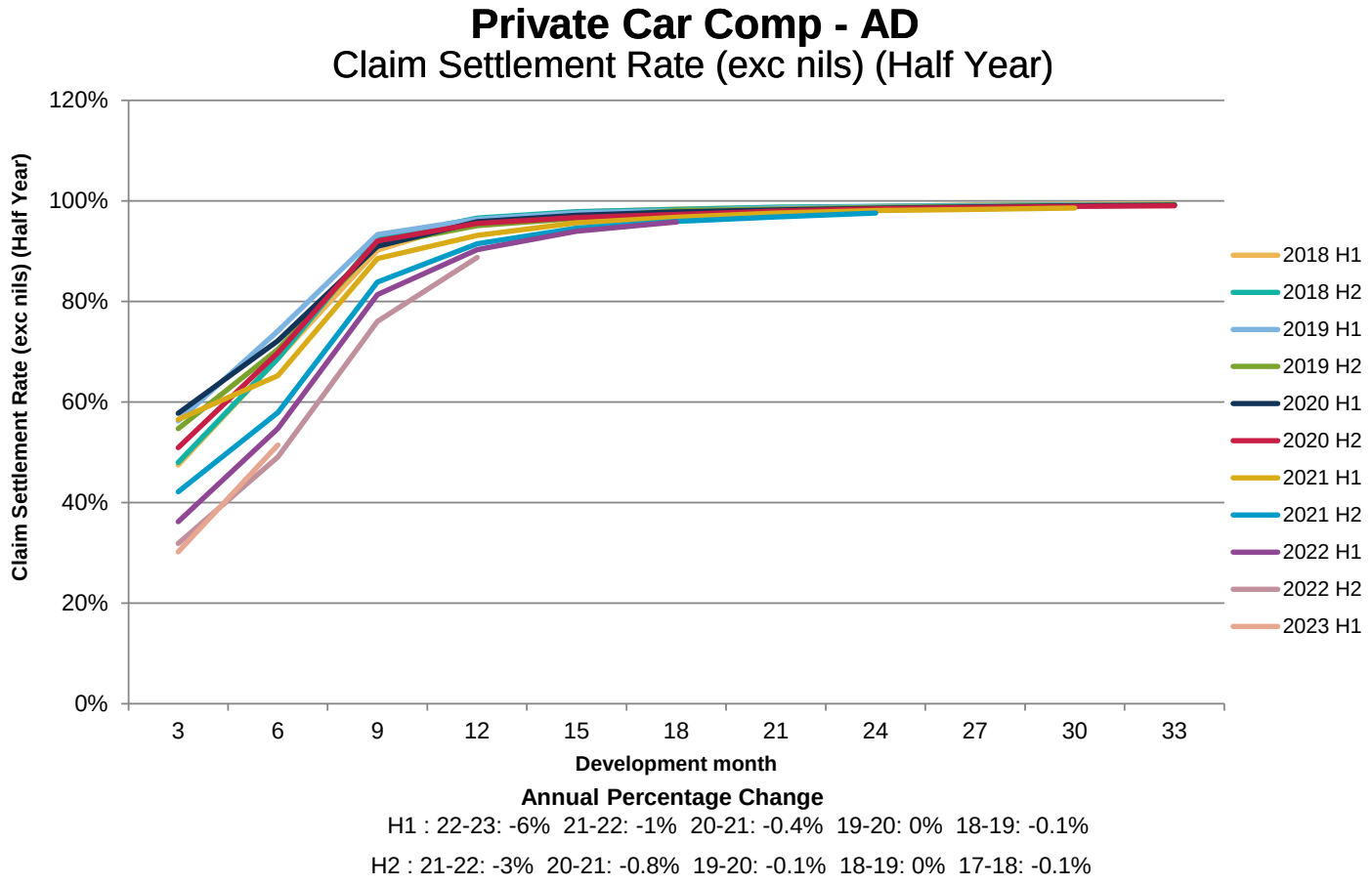
Industry Statistics - AD

Settlement Rate HY2023



Settlement rates getting considerably slower from 2021 H2 onwards. Slow settlements rate continue into 2023 H1.

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Industry Statistics - AD

Projected AD Results YE2022

Projected Ultimate AD Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate AD Claim Frequency (Non-nil claims per million vehicle years)	Ultimate AD Gross Claim Severity (£)	Ultimate AD Recovery Rate %	Ultimate AD Net Claim Severity (£)	Ultimate AD Net Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in AD Gross Severity (% pa)	Year-on-Year Change in AD Recovery Rate (% pa)	Year-on-Year Change in AD Net Severity (% pa)	Year-on-Year Change in AD Net Burning Cost (% pa)
2014	17.9	47,464	1,896	42.8%	1,085	51.5	0.1%	10.1%	-0.4%	10.4%	10.5%
2015	18.6	47,607	2,030	41.7%	1,183	56.3	0.3%	7.0%	-2.5%	9.0%	9.3%
2016	19.7	46,917	2,232	42.9%	1,275	59.8	-1.4%	10.0%	2.7%	7.8%	6.3%
2017	20.3	44,265	2,447	43.4%	1,384	61.3	-5.7%	9.6%	1.4%	8.5%	2.4%
2018	20.7	44,713	2,680	42.3%	1,547	69.2	1.0%	9.5%	-2.7%	11.8%	12.9%
2019	20.6	43,117	2,845	43.4%	1,611	69.5	-3.6%	6.1%	2.5%	4.2%	0.5%
2020	20.2	29,567	3,098	41.2%	1,821	53.8	**-31.4%**	8.9%	-4.9%	13.0%	**-22.5%**
2021	20.0	33,657	3,520	42.0%	2,042	68.7	13.8%	13.6%	1.9%	12.1%	**27.7%**
2022	19.5	39,673	4,103	42.1%	2,376	94.3	17.9%	16.6%	0.2%	16.4%	**37.2%**
Average (2015 to 2022)							-2.6%	10.6%	0.1%	10.5%	7.6%
Average (2017 to 2022)							-2.2%	10.9%	-0.6%	11.4%	9.0%
Average (2019 to 2022)							-2.7%	13.0%	-1.0%	13.8%	10.7%

£25 increase in burning cost in 2022.

Inflation increases to 16% in 2022.

- Note – No adjustments have been made for potential distortions / impact of COVID-19 or claims inflation on claims experience.

Institute and Faculty of Actuaries

Industry Statistics - AD

Projected AD Results YE2022

Projected Ultimate AD Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate AD Claim Frequency (Non-nil claims per million vehicle years)	Ultimate AD Gross Claim Severity (£)	Ultimate AD Recovery Rate %	Ultimate AD Net Claim Severity (£)	Ultimate AD Net Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in AD Gross Severity (% pa)	Year-on-Year Change in AD Recovery Rate (% pa)	Year-on-Year Change in AD Net Severity (% pa)	Year-on-Year Change in AD Net Burning Cost (% pa)
2020 Q1	5.1	39,082	3,034	42.4%	1,747	68.3	-9.4%	4.3%	-7.1%	10.5%	0.1%
2020 Q2	5.0	17,525	3,025	39.5%	1,831	32.1	**-57.1%**	10.1%	-8.4%	17.1%	**-49.7%**
2020 Q3	5.1	30,491	3,050	42.0%	1,769	53.9	**-27.0%**	9.8%	-4.2%	13.4%	-17.3%
2020 Q4	5.1	31,020	3,265	40.0%	1,958	60.7	**-33.7%**	11.3%	-2.6%	13.3%	**-24.8%**
2021 Q1	5.0	24,900	3,366	38.6%	2,067	51.5	**-36.3%**	10.9%	-9.0%	18.3%	**-24.6%**
2021 Q2	5.0	33,238	3,261	43.7%	1,836	61.0	**89.7%**	7.8%	10.7%	0.3%	**90.2%**
2021 Q3	5.0	36,009	3,528	43.3%	1,999	72.0	18.1%	15.7%	3.1%	13.0%	**33.5%**
2021 Q4	5.0	40,439	3,821	41.5%	2,233	90.3	**30.4%**	17.0%	3.8%	14.1%	**48.7%**
2022 Q1	4.9	39,162	4,003	41.7%	2,334	91.4	**57.3%**	18.9%	8.0%	12.9%	**77.6%**
2022 Q2	4.9	36,707	3,999	43.3%	2,269	83.3	10.4%	**22.6%**	-1.0%	**23.6%**	**36.5%**
2022 Q3	4.9	37,351	4,158	44.2%	2,320	86.7	3.7%	17.8%	2.0%	16.1%	**20.4%**
2022 Q4	4.8	45,581	4,231	39.8%	2,547	116.1	12.7%	10.7%	-4.2%	14.1%	**28.6%**

13% increase in frequency in 2022 Q4.

Consistent high inflation during 2022.

- Note – No adjustments have been made for potential distortions / impact of COVID-19 or claims inflation on claims experience.

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Institute and Faculty of Actuaries

1. Market Environment
2. Industry Statistics
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   - Capped TPI
   - Excess TPI
3. Conclusions
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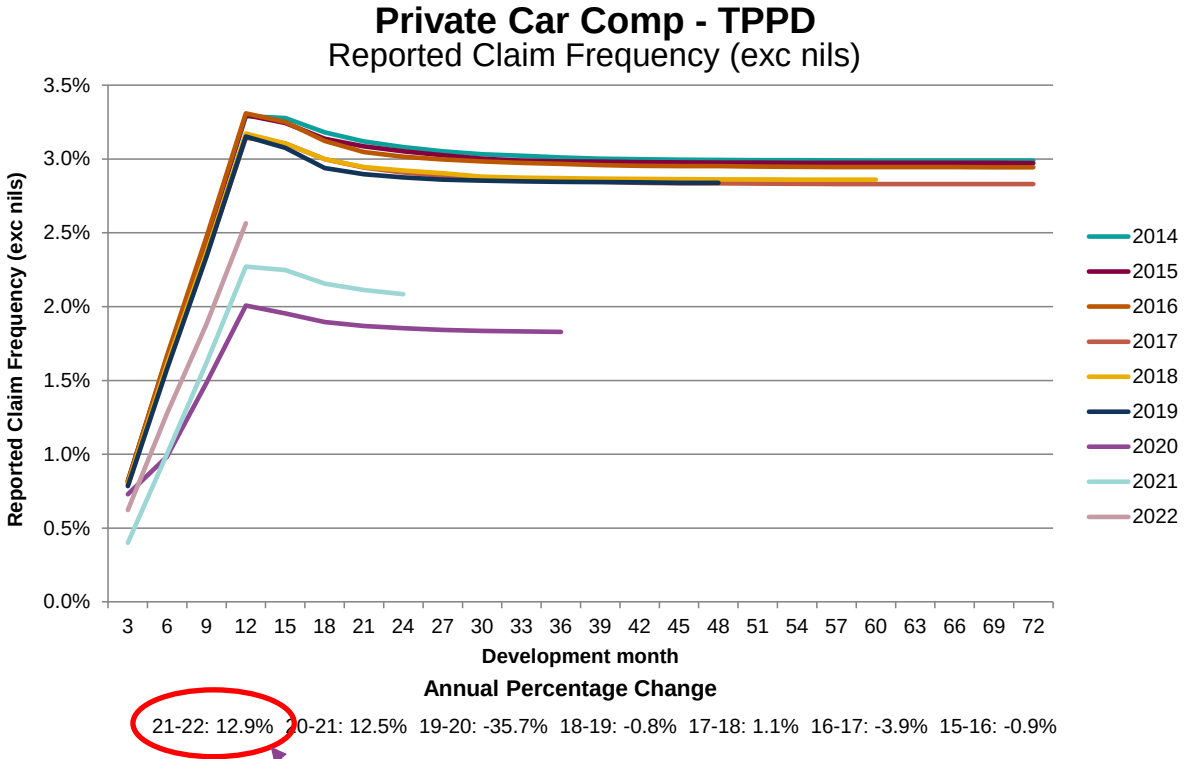
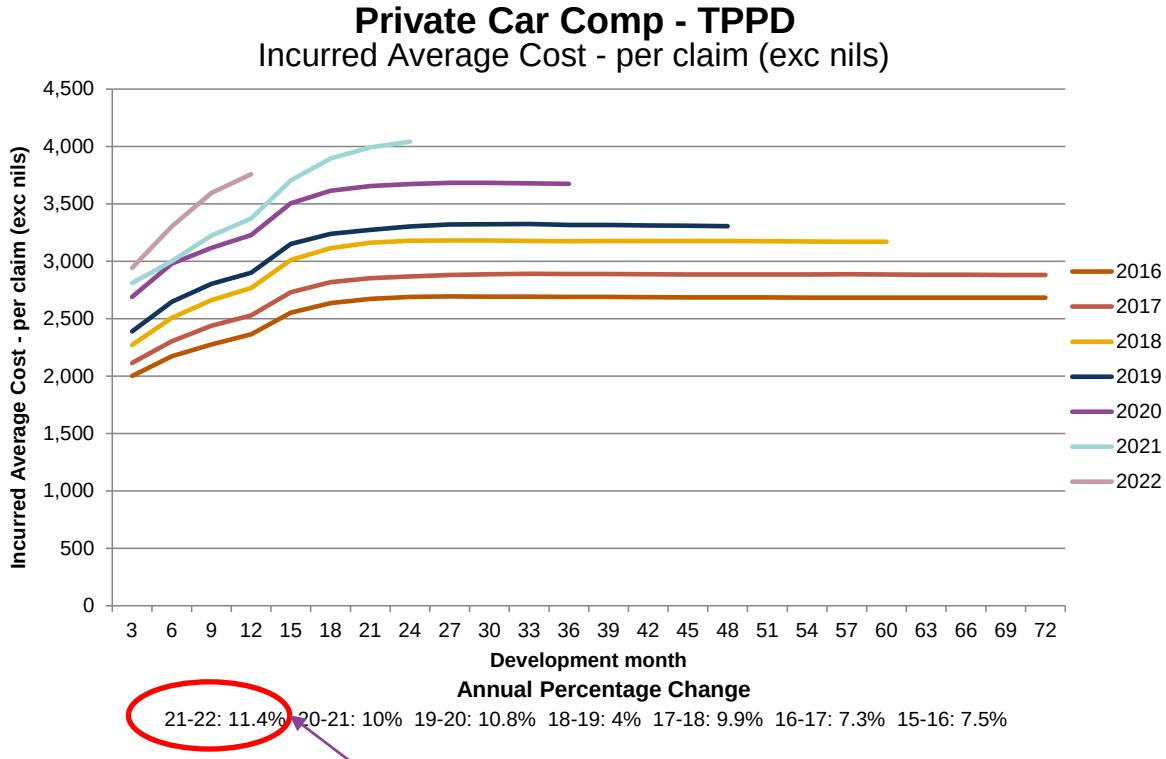
2 November 2023

Industry Statistics - TPPD

Frequency and Severity YE 2022





As with AD, 2022 frequency up from 2021. 2022 is 19% below 2019 frequency.

Inflation 11% in 2022. 2021 shows significantly more development post 12 months than 2021

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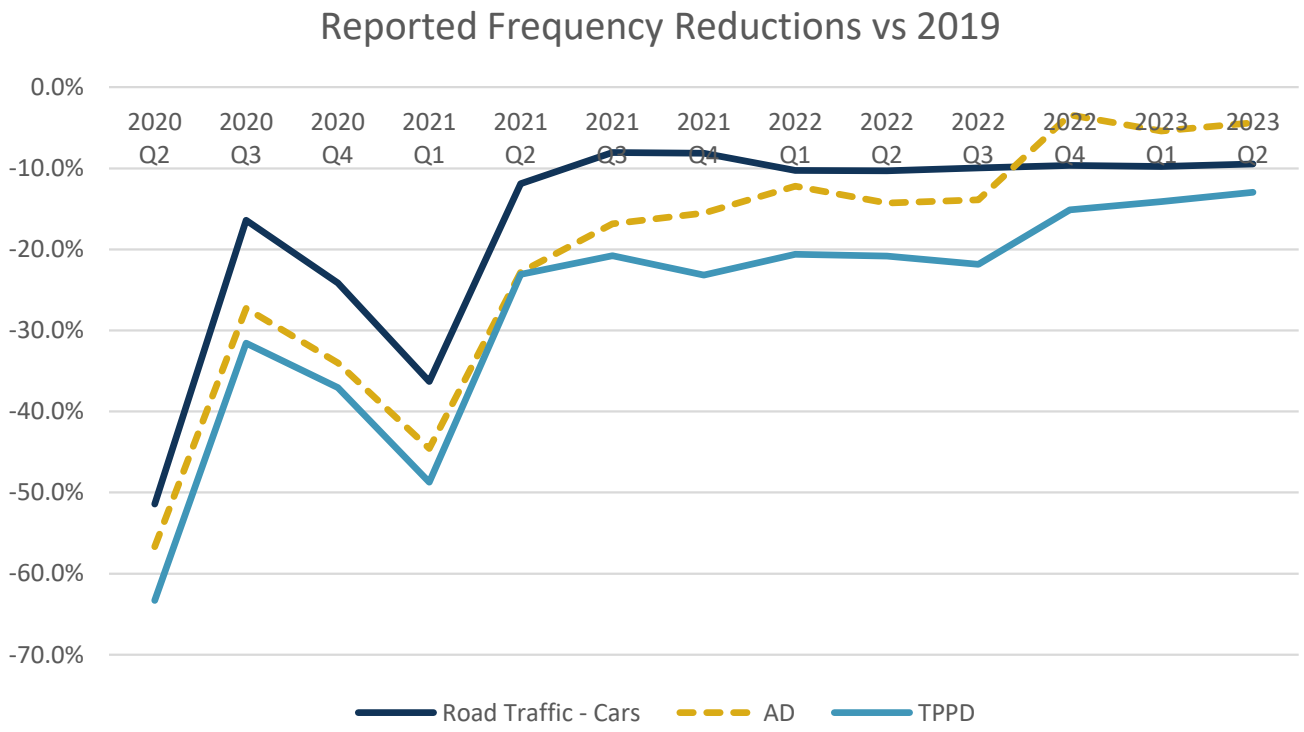
Industry Statistics - TPPD

Frequency HY2023



Accident Quarter	Change in Car Traffic	Change in TPPD Frequency
2020 Q2	-51.4%	-63.3%
2020 Q3	-16.4%	-31.6%
2020 Q4	-24.2%	-37.0%
2021 Q1	-36.3%	-48.7%
2021 Q2	-11.9%	-23.1%
2021 Q3	-8.1%	-20.8%
2021 Q4	-8.2%	-23.2%
2022 Q1	-10.3%	-20.6%
2022 Q2	-10.3%	-20.8%
2022 Q3	-10.0%	-21.8%
2022 Q4	-9.7%	-15.1%
2023 Q1	-9.8%	-14.1%
2023 Q2	-9.5%	-12.9%

- Reduction in TPPD frequency larger than for AD. Frequencies around 20% lower than for 2019 for 2021 Q2 to 2023 Q2 but the gap reduces to around 14% for 2022 Q4 to 2023 Q2.

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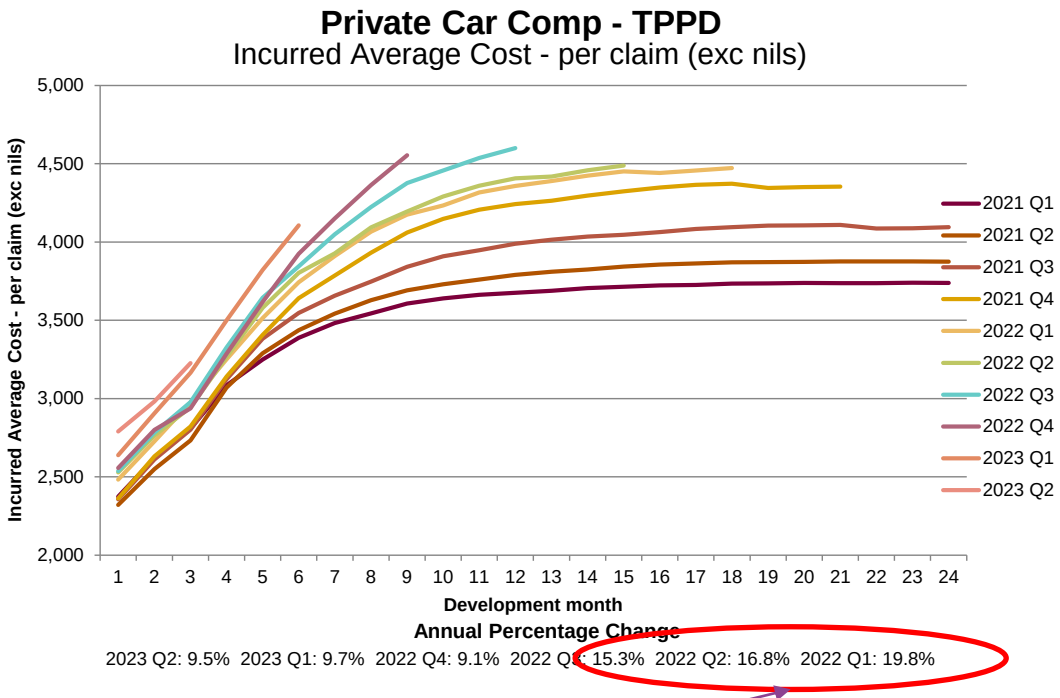
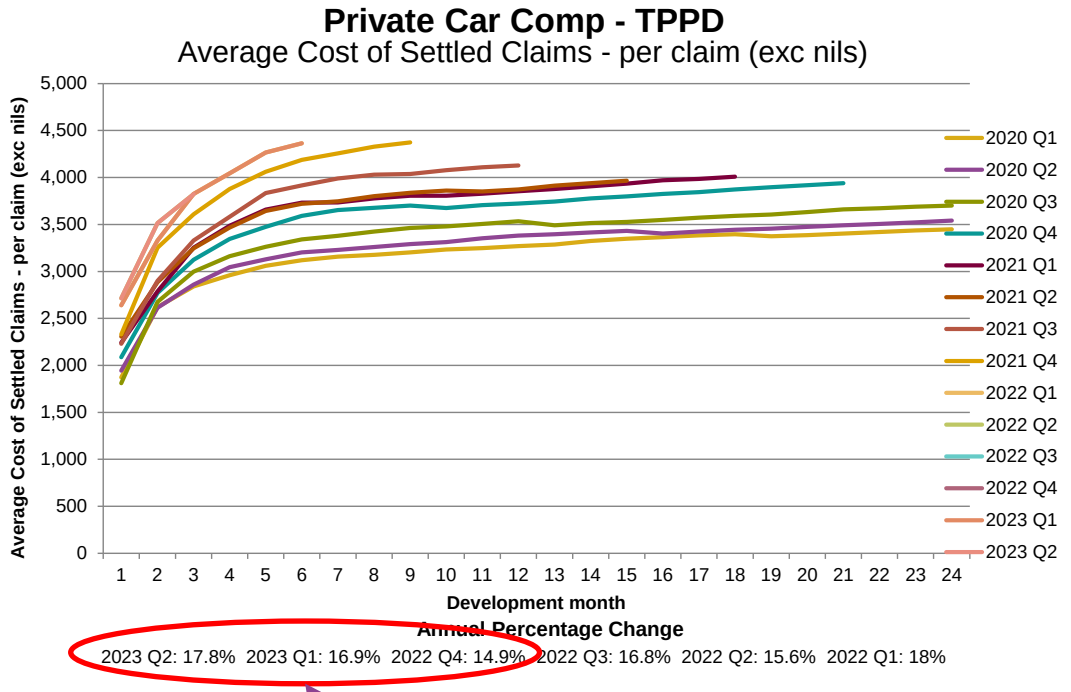
Source : Table TRA2503e; https://www.gov.uk/government/statistical-data-sets/tra25-quarterly-estimates

Industry Statistics - TPPD

Severity HY2023





Incurred severity inflation 20% for 2022 Q1 and 17% for 2022 Q2. Inflation rates for these periods 12 months ago was 11% and 8%.

Settled severity inflation considerably higher than incurred for 2022 Q4 to 2023 Q2.

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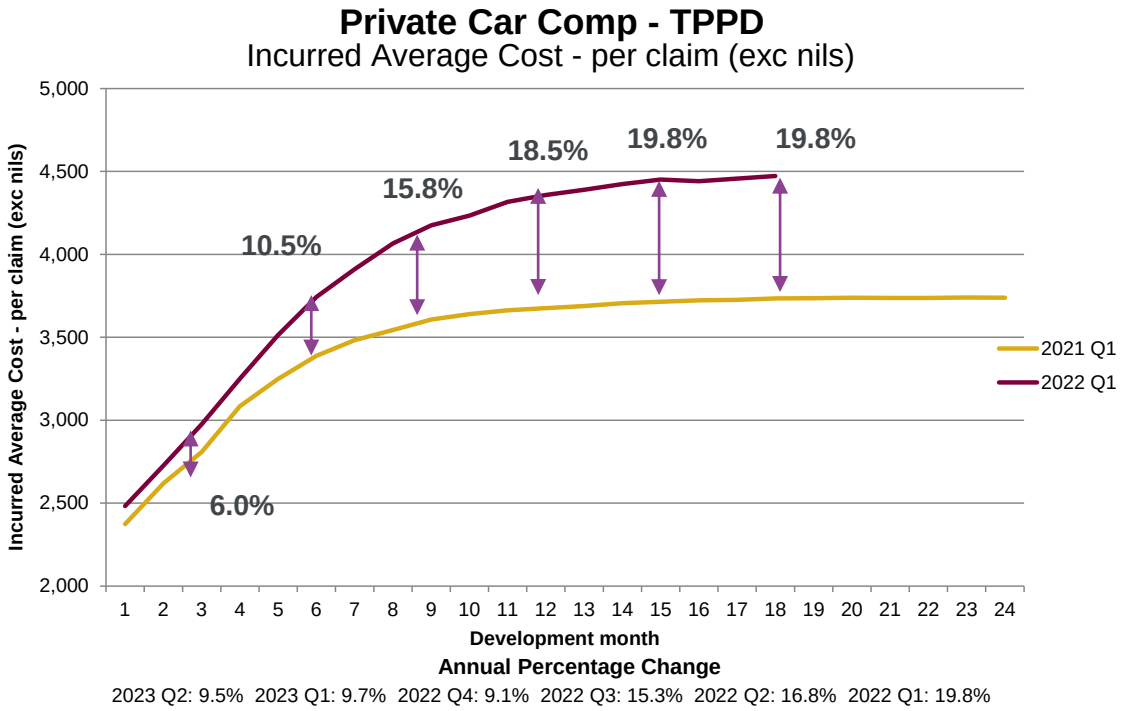
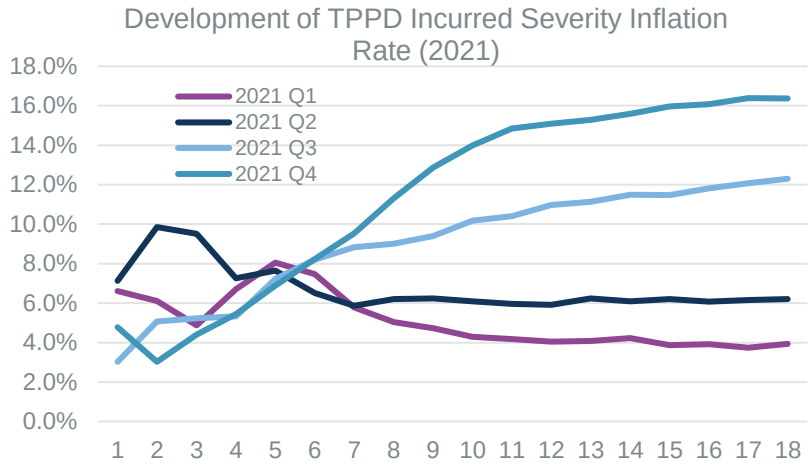
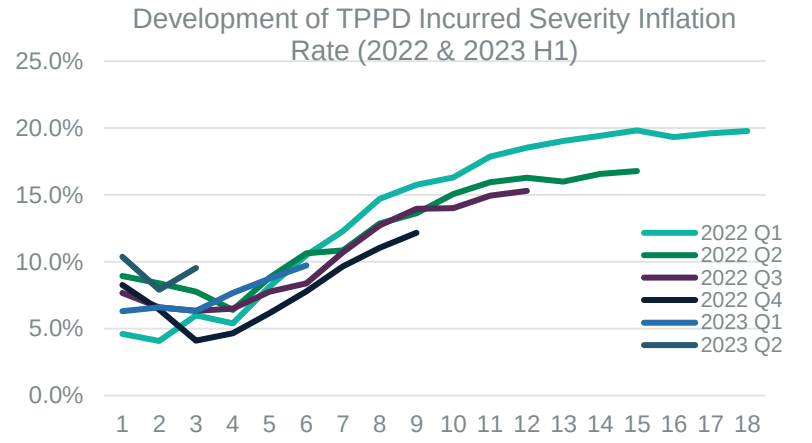
Industry Statistics - TPPD

Severity HY2023







Inflation rates started to 'develop' in 2021 Q3

Consistent increase seen for 2022 accident periods

Taking 2022 Q1 as an example we can see that the inflation rate started 6.0% after 3 months of development but increased to 19.8% at 18 months development.

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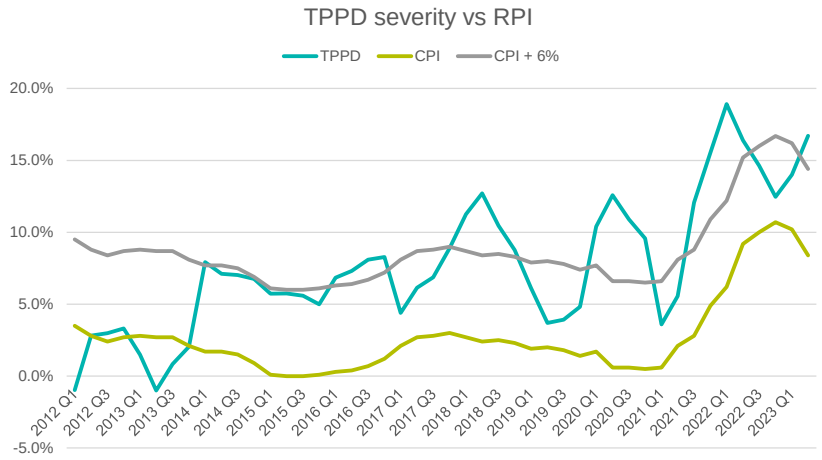
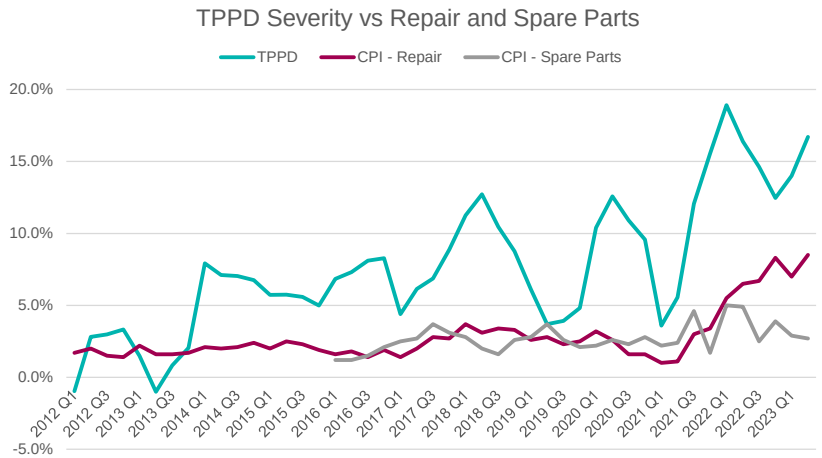
Industry Statistics - TPPD

Severity HY2023



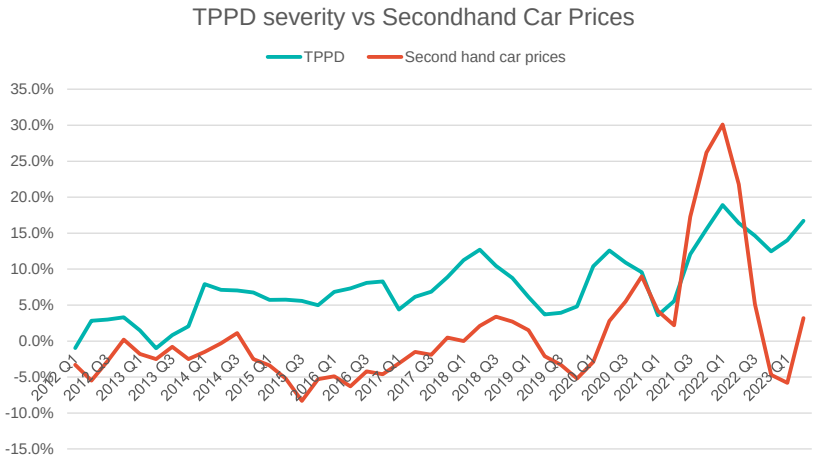


Methodology

Projection of TPPD severity excluding nils severity triangle.

Compare accident quarter inflation rates (e.g. 2021 Q4 vs 2020 Q4) against CPI, 'Secondhand Car Prices – CPI', 'Repair – CPI Vehicle Transport and Repair' and 'CPI – Spare Parts'.

A limitation of the analysis is comparing an accident period inflation rate to a calendar period economic inflation measure.



- Projections of TPPD severity have inflation increasing significantly in 2021 Q3 up to around 15% pa from 2022 H1.
- Claims inflation was on average 7% higher than CPI from 2012 to 2020.

Correlation between claims inflation and economic indices				
Periods	CPI	Secondhand car prices	Repair	Spare Parts
2012-2016	-75%	-22%	23%	46%
2017-2020	-16%	61%	36%	-39%
2021-2023 Q2	66%	47%	72%	42%
2012-2023 Q2	54%	62%	72%	34%

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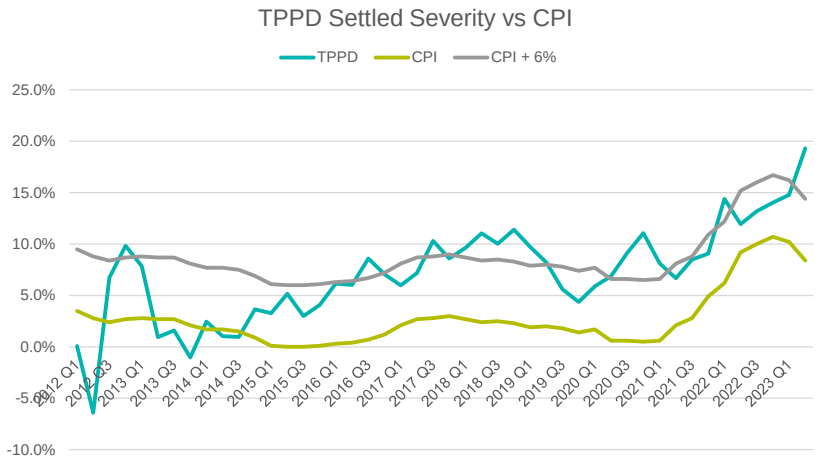
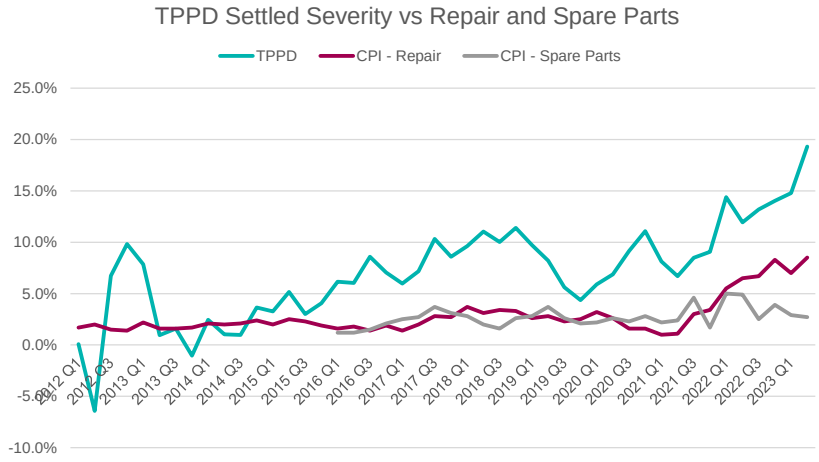
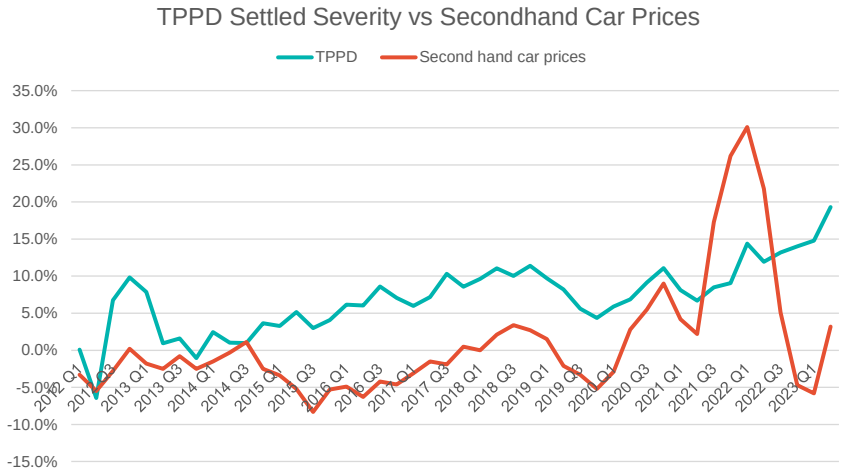
Industry Statistics - TPPD

Severity HY2023







Methodology

Take settled TPPD severity excluding nils by calendar quarter.

Compare accident quarter inflation rates (e.g. 2021 Q4 vs 2020 Q4) against CPI, 'Secondhand Car Prices – CPI', 'Repair – CPI Vehicle Transport and Repair' and 'CPI – Spare Parts'.

- TPPD settled severity have inflation increasing significantly in 2021 Q3 up to around 15% pa from 2022 H1.
- Correlations on a settlement basis do not appear higher than on an accident basis.

Correlation between claims inflation and economic indices				
Periods	CPI	Secondhand car prices	Repair	Spare Parts
2012-2016	-31%	-1%	-21%	39%
2017-2020	19%	72%	28%	15%
2021-2023 Q2	76%	-20%	91%	19%
2012-2023 Q2	57%	42%	68%	42%

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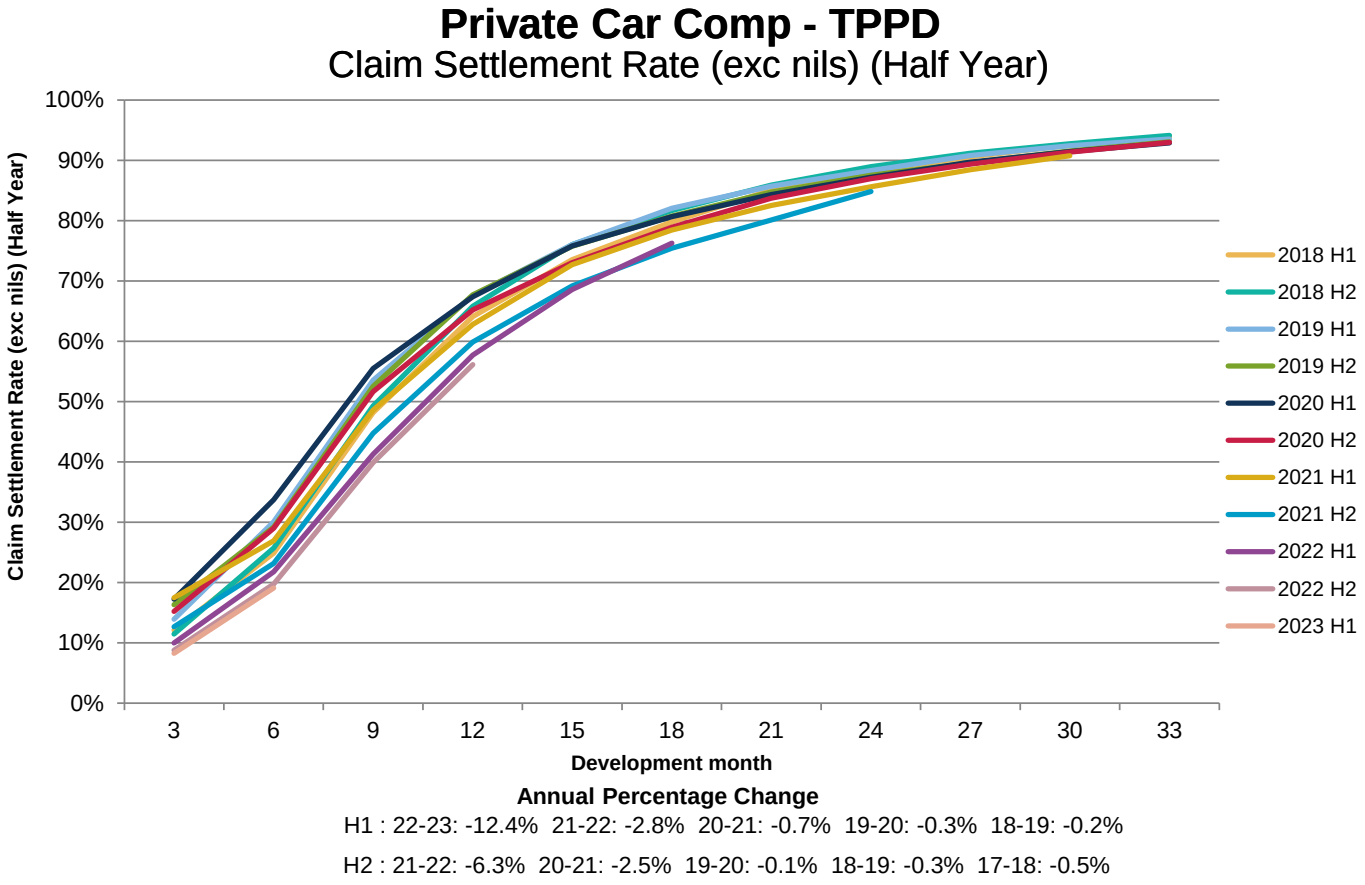
Industry Statistics - TPPD

Settlement Rate HY2023



Annual Percentage Change

H1 : 22-23: -12.4% 21-22: -2.8% 20-21: -0.7% 19-20: -0.3% 18-19: -0.2%

H2 : 21-22: -6.3% 20-21: -2.5% 19-20: -0.1% 18-19: -0.3% 17-18: -0.5%

As with AD, increasing levels of slowdown from 2021 Q3 onwards which continues into 2023 H1.

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Industry Statistics - TPPD

Projected TPPD Results YE2022

Projected Ultimate TPPD Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate TPPD Claim Frequency (Non-nil claims per million vehicle years)	Ultimate TPPD Claim Severity (£)	Ultimate TPPD Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2012	11.4	32,443	2,217	71.9	-7.1%	3.0%	-4.3%
2013	15.4	30,019	2,255	67.7	-7.5%	1.7%	-5.9%
2014	18.3	29,870	2,364	70.6	-0.5%	4.8%	4.3%
2015	19.0	29,719	2,495	74.1	-0.5%	5.5%	5.0%
2016	20.0	29,438	2,682	79.0	-0.9%	7.5%	6.5%
2017	20.5	28,297	2,879	81.5	-3.9%	7.3%	3.2%
2018	20.9	28,596	3,163	90.5	1.1%	9.9%	11.1%
2019	20.8	28,354	3,291	93.3	-0.8%	4.0%	3.1%
2020	20.4	18,222	3,644	66.4	**-35.7%**	10.7%	**-28.8%**
2021	20.3	20,453	4,019	82.2	12.2%	10.3%	**23.8%**
2022	19.8	23,220	4,515	104.8	13.5%	12.3%	**27.5%**
Average (2015 to 2022)					-3.5%	8.8%	5.1%
Average (2017 to 2022)					-3.9%	9.4%	5.2%
Average (2019 to 2022)					-6.4%	11.1%	4.0%

TPPD burning cost increased by £23 in 2022 to above pre-COVID levels.

2022 severity of 12.3%. This doesn't reflect the increase in inflation rate on 2022 accidents observed during the first half of 2023 (see slide 32).

- Note – No adjustments have been made for potential distortions / impact of COVID-19 or claims inflation on claims experience.

Institute and Faculty of Actuaries

Industry Statistics - TPPD

Projected TPPD Results YE2022

Projected Ultimate TPPD Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate TPPD Claim Frequency (Non-nil claims per million vehicle years)	Ultimate TPPD Claim Severity (£)	Ultimate TPPD Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2020 Q1	5.1	24,678	3,566	88.0	-10.6%	9.6%	-2.0%
2020 Q2	5.0	10,028	3,622	36.3	**-63.5%**	12.3%	**-59.0%**
2020 Q3	5.1	18,883	3,655	69.0	**-32.1%**	12.2%	**-23.8%**
2020 Q4	5.1	19,198	3,743	71.9	**-37.0%**	9.7%	**-30.9%**
2021 Q1	5.0	14,062	3,728	52.4	**-43.0%**	4.5%	**-40.4%**
2021 Q2	5.1	21,321	3,854	82.2	**112.6%**	6.4%	**126.2%**
2021 Q3	5.1	22,384	4,049	90.6	18.5%	10.8%	**31.3%**
2021 Q4	5.1	23,992	4,307	103.3	**25.0%**	15.1%	**43.8%**
2022 Q1	5.0	22,336	4,411	98.5	**58.8%**	18.3%	**88.0%**
2022 Q2	5.0	22,398	4,458	99.8	5.0%	15.6%	**21.5%**
2022 Q3	5.0	22,096	4,555	100.7	-1.3%	12.5%	11.1%
2022 Q4	4.9	26,097	4,621	120.6	8.8%	7.3%	16.7%

As with AD, 2022 Q4 frequency higher than 2021 Q4.
Severity appears lower in 2022 H2 than 2022 H1 but does not reflect observed increase in severity on these periods in 2023 H1.

- Note – No adjustments have been made for potential distortions / impact of COVID-19 or claims inflation on claims experience.

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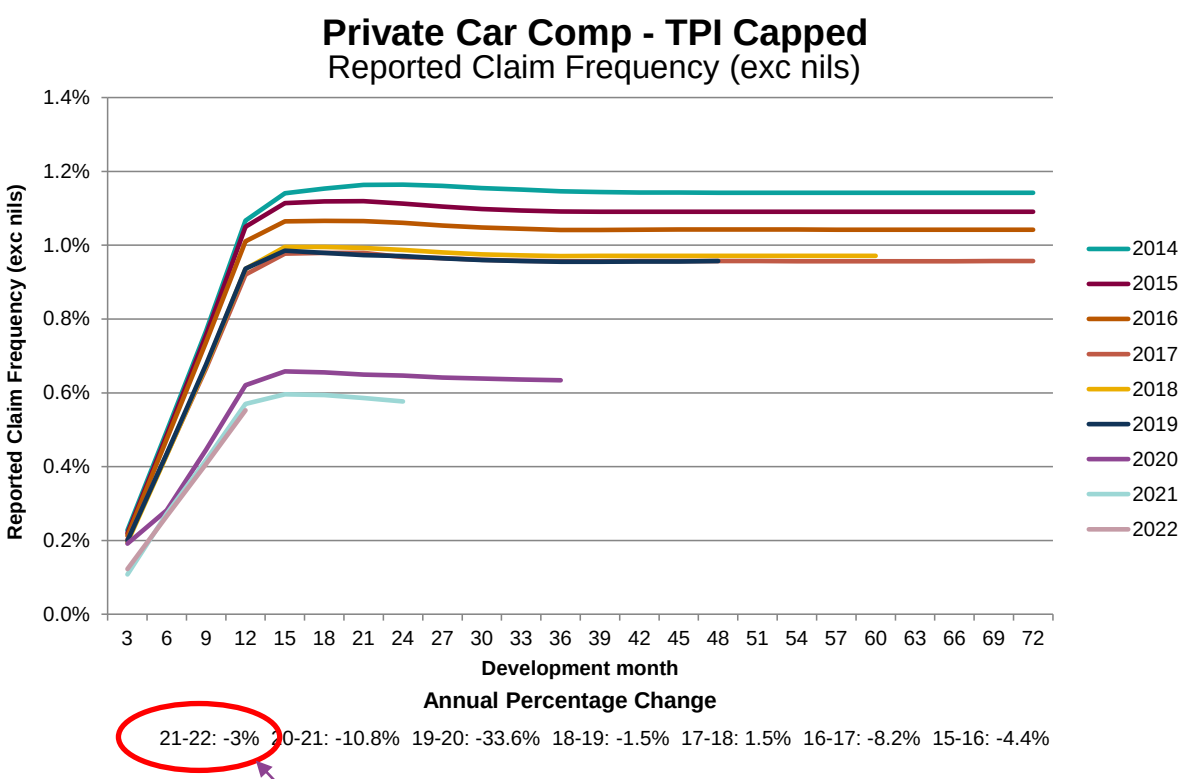
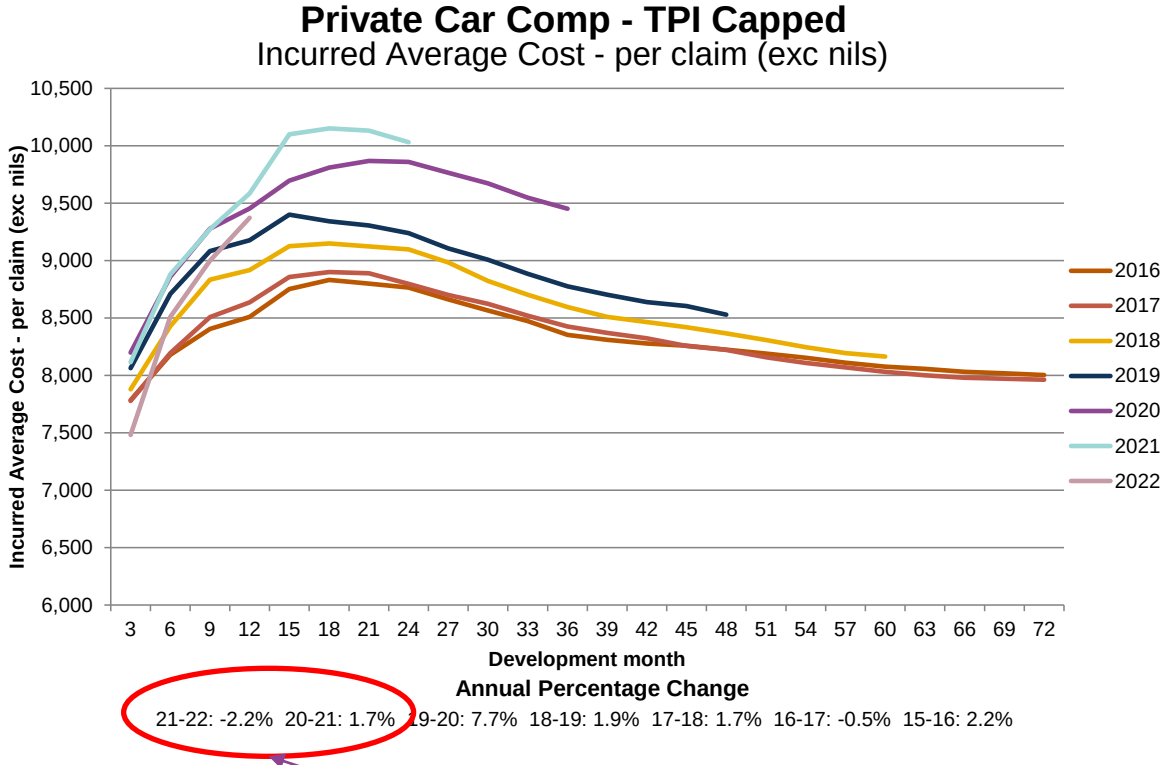
Industry Statistics - Capped TPI

Frequency and Severity YE 2022



2022 frequency in line with 2021



Minimal inflation in 2021 and 2022.

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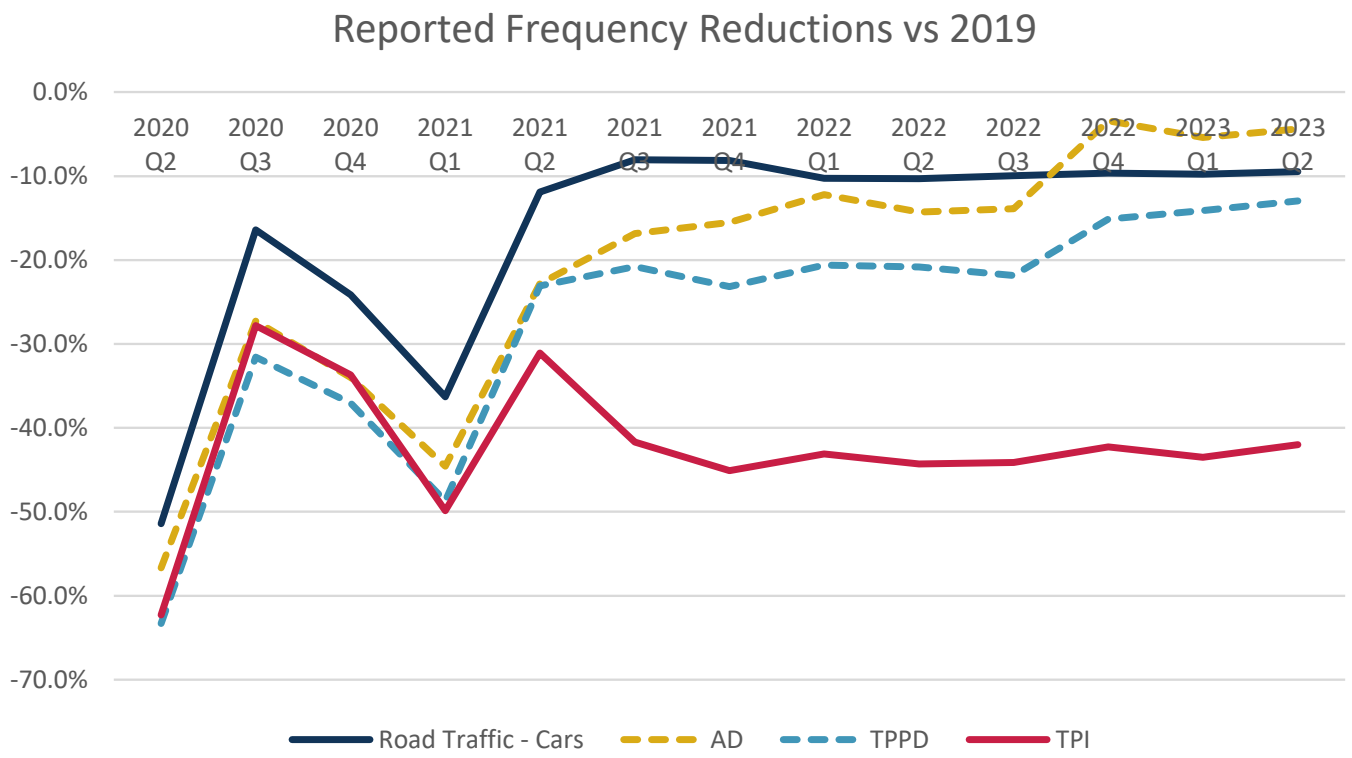
Industry Statistics - Capped TPI

Frequency HY2023



Accident Quarter	Change in Car Traffic	Change in TPI Frequency
2020 Q2	-51.4%	-62.3%
2020 Q3	-16.4%	-27.8%
2020 Q4	-24.2%	-33.7%
2021 Q1	-36.3%	-49.9%
2021 Q2	-11.9%	-31.1%
2021 Q3	-8.1%	-41.7%
2021 Q4	-8.2%	-45.1%
2022 Q1	-10.3%	-43.1%
2022 Q2	-10.3%	-44.3%
2022 Q3	-10.0%	-44.1%
2022 Q4	-9.7%	-42.3%
2023 Q1	-9.8%	-43.5%
2023 Q2	-9.5%	-42.0%

- Reduction in Capped TPI frequency from 2021 Q3 to 2023 Q2 is 42% to 45%. This is reasonably consistent with the 45% reduction in combined claim notifications from the MoJ and OIC portals. A smaller increase seen in 2022 Q4 compared to AD and TPPD.

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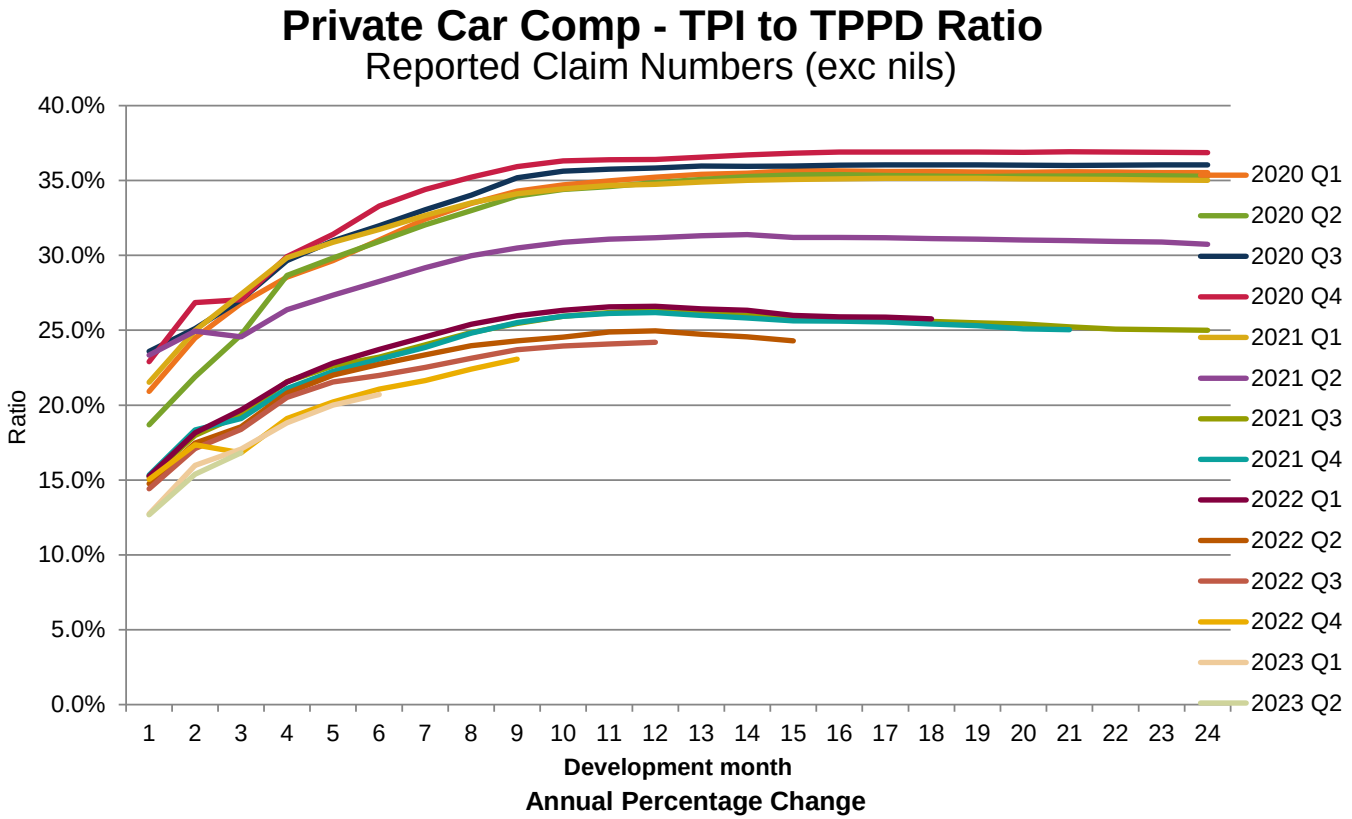
Source : Table TRA2503e; https://www.gov.uk/government/statistical-data-sets/tra25-quarterly-estimates

Industry Statistics - Capped TPI

TPI to TPPD Ratio HY2023



Annual Percentage Change

2023 Q2: -9.4% 2023 Q1: -12.7% 2022 Q4: -9.6% 2022 Q3: -8.2% 2022 Q2: -22.2% 2022 Q1: -26.7% 2021 Q4: -32.2% 2021 Q3: -30.6%

- Post Whiplash Reforms TPI to TPPD ratio has reduced by on average 30% for accident periods 2021 Q3 to 2022 Q1.
- Further reductions also seen in 2022 Q3 to 2023 Q2

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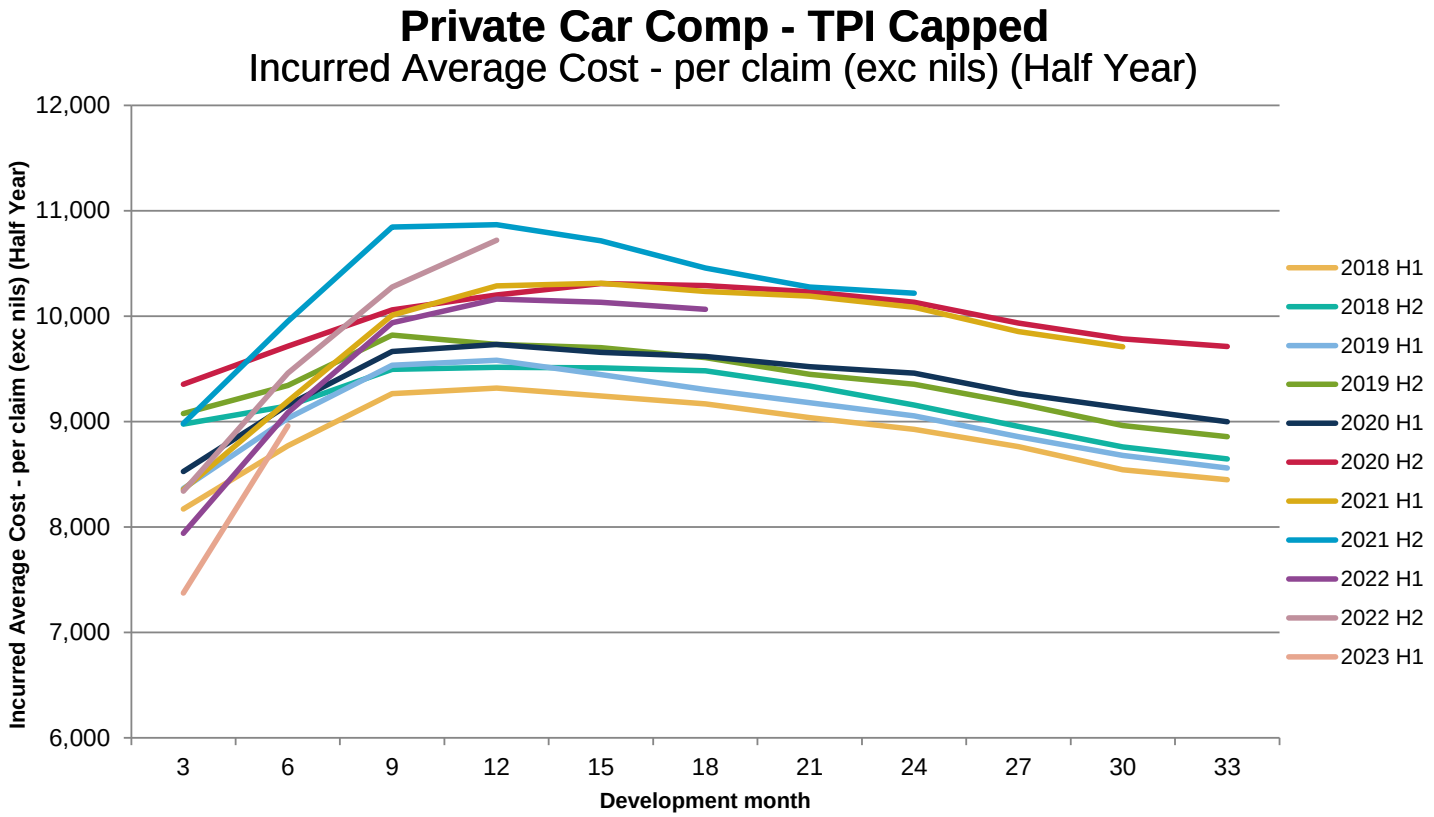
Industry Statistics - Capped TPI

Severity HY2023



Annual Percentage Change

H1 : 22-23: -1.4% 21-22: -1.7% 20-21: 6.4% 19-20: 5% 18-19: 1.4%

H2 : 21-22: -1.4% 20-21: 0.8% 19-20: 9.8% 18-19: 1.5% 17-18: 1.3%

Severity appears reasonably flat in recent periods.
No clear impact from whiplash reforms on severity.

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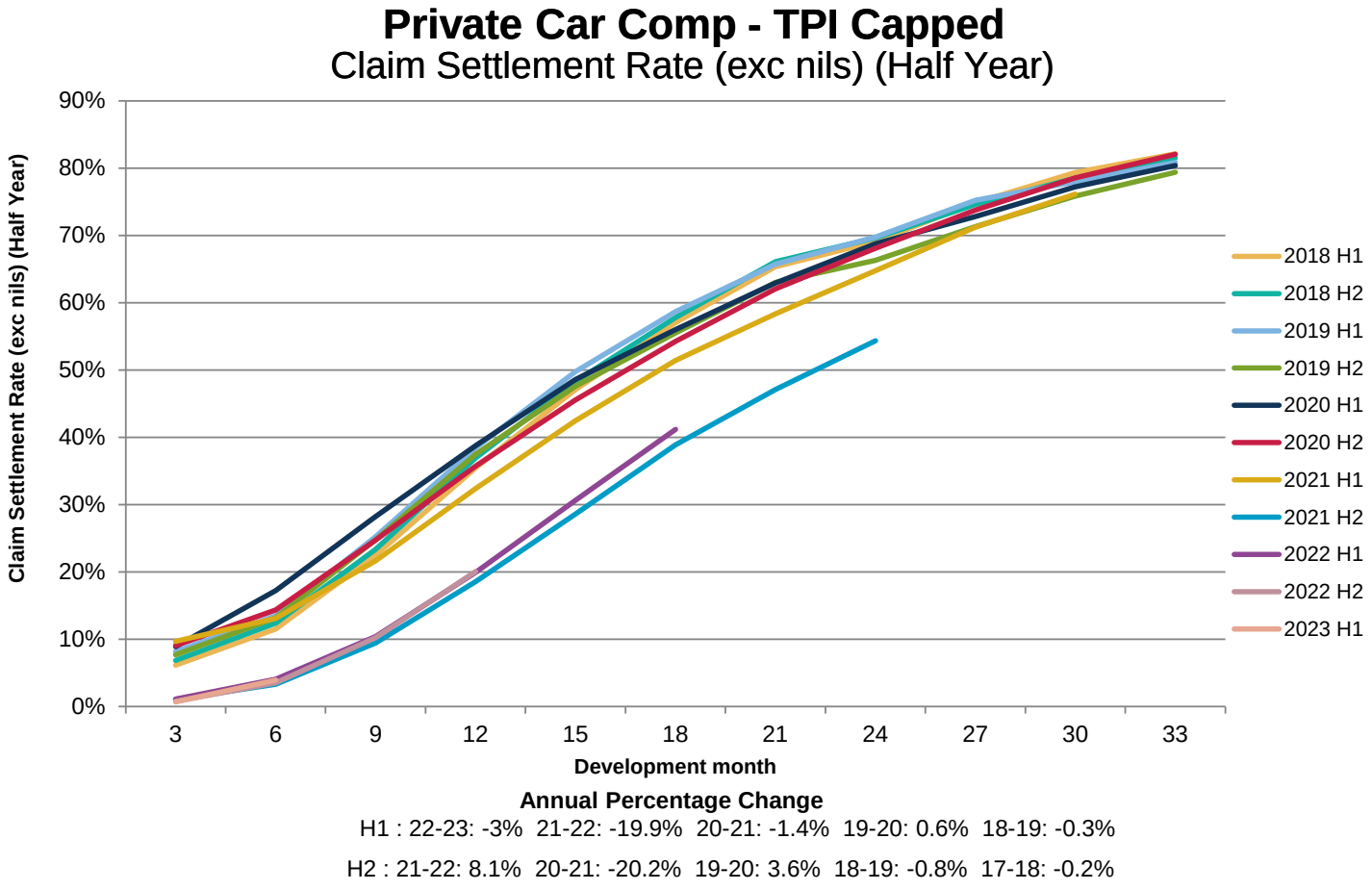
Industry Statistics – Capped TPI

Settlement Rate HY2023



Annual Percentage Change

H1 : 22-23: -3% 21-22: -19.9% 20-21: -1.4% 19-20: 0.6% 18-19: -0.3%

H2 : 21-22: 8.1% 20-21: -20.2% 19-20: 3.6% 18-19: -0.8% 17-18: -0.2%

Slowdown in settlement rates during 2020 persist in 2021. Significant reduction in settlement rate post whiplash reforms.

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Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

- As with previous iterations of the TPWP we have analysed Capped TPI by bands. This year we have split to £1k to £10k band into £1 to £5k and £5k to £10k. We have used an indexation of 1% p.a. The exception is for the 100k limit which is still indexed at 7% p.a. The bands are defined as below in 2010 accident year years and indexed at 1% p.a.
  - £0 to £1k *(£1.1k in 2021 accident year)*
  - £1k to £5k *(£6k in 2021 accident year)*
  - £5k to £10k *(£11k in 2021 accident year)*
  - £10k to £20k *(£22k in 2021 accident year)*
  - £20k to £50k *(£56k in 2021 accident year)*
  - £50k to £100k *(£210k in 2021 accident year)*
- We have maintained the same band definitions as previously for Excess TPI.

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Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

- When presenting results of a layered analysis, there is a choice in how to partition the claim amounts:
  - Type 1: In which claims that exhaust the width of a particular layer contribute an amount equal to the layer's width
  - Type 2: In which claims that exhaust the width of a particular layer are removed from that layer, and the full claim amounts "from ground up" ("FGU") are allocated to the next layer up

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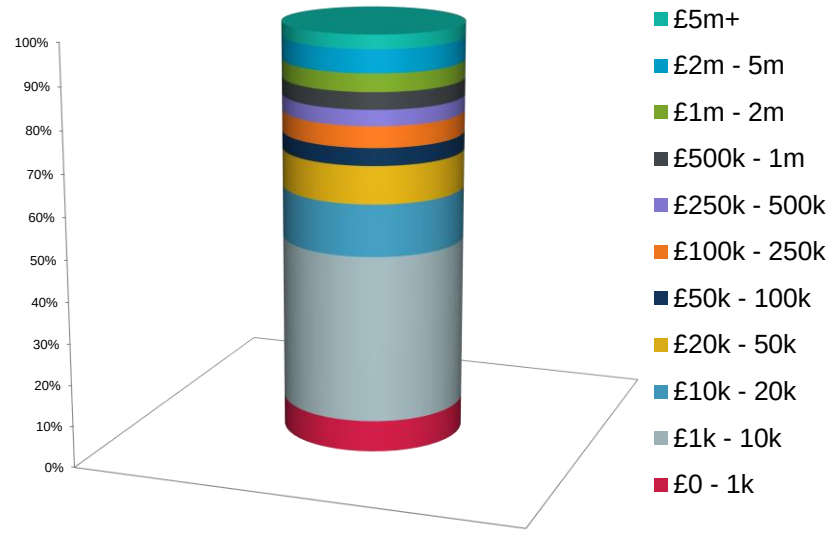
Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

- Using the Type 1 definition, a claim of £15,000 from accident year 2010 contributes:
  - £1k to Layer 1 (0 – £1k)
  - £9k to Layer 2 (£1k – £10k)
  - £5k to Layer 3 (£10k – £20k)
  - £0 to all other layers
- The chart shows the projected total TPI burning cost split by layer using Type 1 definition.
- In this presentation, any charts which use this definition will be accompanied with a version of this graphic. Shading represents the portion(s) of the claim that is relevant to the given statistic.



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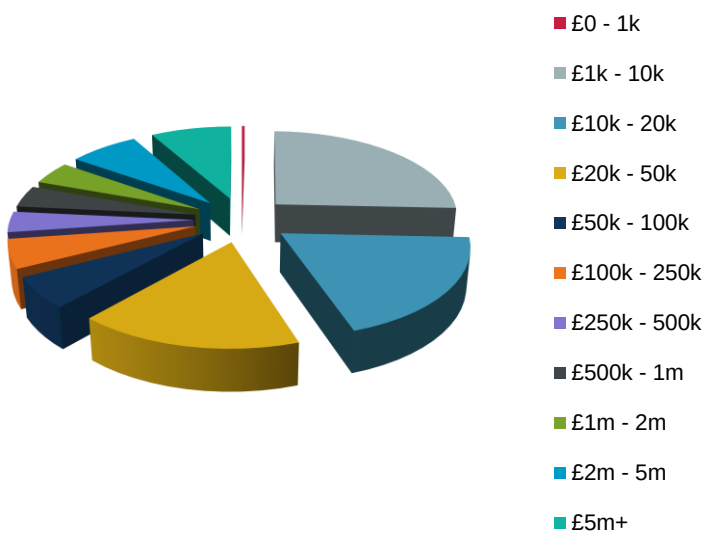
Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

- Using the Type 2 definition, a claim of £15,000 from accident year 2010 contributes:
  - £15k to Layer 3 (£10k – £20k)
  - £0 to all other layers
- The chart shows the projected total TPI burning cost split by layer using Type 2 definition.
- In this presentation, any charts which use this definition will be accompanied with a version of this graphic. Shading represents the portion(s) of the claim that is relevant to the given statistic.



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Industry Statistics - Capped TPI

Projected Capped TPI Results YE2022

Projected Ultimate Capped TPI Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate Capped TPI Claim Frequency (Non-nil claims per million vehicle years)	Ultimate Capped TPI Claim Severity (£)	Ultimate Capped TPI Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2013	8.6	15,244	8,132	124.0	-1.5%	-5.0%	-6.4%
2014	11.7	11,896	8,114	96.5	**-22.0%**	-0.2%	**-22.1%**
2015	12.6	11,163	7,978	89.1	-6.2%	-1.7%	-7.7%
2016	13.6	10,436	8,179	85.4	-6.5%	2.5%	-4.2%
2017	16.4	9,266	8,269	76.6	-11.2%	1.1%	-10.2%
2018	18.7	9,397	8,321	78.2	1.4%	0.6%	2.1%
2019	18.5	9,329	8,444	78.8	-0.7%	1.5%	0.7%
2020	18.3	6,235	8,947	55.8	**-33.2%**	6.0%	**-29.2%**
2021	18.3	5,414	8,833	47.8	-13.2%	-1.3%	-14.3%
2022	15.8	5,581	8,577	47.9	3.1%	-2.9%	0.1%
Average (2015 to 2022)					-9.4%	1.0%	-8.5%
Average (2017 to 2022)					-9.6%	0.7%	-9.0%
Average (2019 to 2022)					-15.7%	0.5%	-15.3%

Burning cost in 2022 level with 2021.

Some severity benefit from whiplash reforms coming through in 2021 and 2022

Projections make no allowance for any other distortions in claim developments or experience such as more widespread COVID-19 impact, changes due to whiplash reforms or recent economic inflationary environment. Estimates of the impact of whiplash reforms will be highly dependent on the case reserve changes introduced by companies following the reforms.

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Industry Statistics - Capped TPI

Projected Capped TPI Results YE2022

Projected Ultimate Capped TPI Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate Capped TPI Claim Frequency (Non-nil claims per million vehicle years)	Ultimate Capped TPI Claim Severity (£)	Ultimate Capped TPI Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2020 Q1	4.6	8,282	8,205	67.9	-11.5%	-0.3%	-11.7%
2020 Q2	4.5	3,333	9,525	31.7	**-62.4%**	12.8%	**-57.6%**
2020 Q3	4.6	6,517	9,523	62.1	**-27.1%**	9.4%	**-20.3%**
2020 Q4	4.6	6,768	9,012	61.0	**-33.3%**	7.1%	**-28.6%**
2021 Q1	4.6	4,716	8,822	41.6	**-43.1%**	7.5%	**-38.8%**
2021 Q2	4.6	6,001	8,956	53.7	**80.0%**	-6.0%	**69.3%**
2021 Q3	4.6	5,227	8,971	46.9	-19.8%	-5.8%	**-24.5%**
2021 Q4	4.5	5,716	8,578	49.0	-15.5%	-4.8%	-19.6%
2022 Q1	4.2	5,587	8,464	47.3	18.5%	-4.1%	13.7%
2022 Q2	4.0	5,384	8,311	44.7	-10.3%	-7.2%	-16.7%
2022 Q3	3.9	5,387	8,865	47.8	3.1%	-1.2%	1.8%
2022 Q4	3.7	5,995	8,690	52.1	4.9%	1.3%	6.2%

Whiplash reforms severity benefit of around 5% seen in data to date.

Burning cost in 2021 H2 to 2022 is around £30 less than in 2019. Adjusting for reductions in TPPD frequency over this time suggests a whiplash reforms benefit of £16 per policy.

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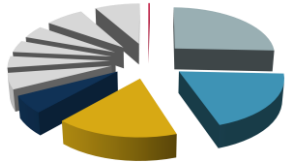
Industry Statistics - Capped TPI

Projected Capped TPI Results YE2022



TPI Band	Change in Freq vs 2019
£0 - 1k	-41%
£1k - 5k	-47%
£5k - 10k	-54%
£10k - 20k	-56%
£20k - 50k	-37%
£50k to £100k	-16%

- Question: where are the reductions in TPI claims frequency coming from?
- The table shows the change in frequency for 2021 Q3 to 2022 Q4 accident periods vs 2019 accident periods.
- Bands £1k to £5k, £5k to £10k and £10k to £20k are all seeing similar reductions in frequency.
- Band £20 to £50k is seeing less of a reduction and Band £50k to £100k is seeing a reduction closer to the reduction in TPPD frequency since 2019.
- The frequency reductions for the top two bands are lower than we saw for 2021 H2 last year (as at 31 Dec 2021).

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Industry Statistics - Capped TPI

Projected Capped TPI Results YE2022

Private Car ComprehensiveTPI Capped Results in Layer (all layers given in 2010 money, indexed at 1% pa)

Accident Period	£0 - 1k	£1k - 5k	£5k - 10k	£10k - 20k	£20k - 50k	£50k - £100k
Average Cost (£)						
2019 H1	1,002	3,346	3,535	6,056	16,474	69,761
2019 H2	999	3,353	3,560	6,137	16,812	68,691
2020 H1	1,003	3,347	3,572	6,205	16,879	76,676
2020 H2	995	3,407	3,651	6,373	17,219	79,284
2021 H1	995	3,342	3,537	6,581	17,569	82,302
2021 H2	947	3,054	3,395	7,045	20,200	88,489
2022 H1	981	2,871	3,229	7,250	21,074	93,413
2022 H2	984	2,899	3,254	7,352	21,509	98,516
Annual Change in Average Cost						
2019 H1						
2019 H2						
2020 H1	0%	0%	1%	2%	2%	10%
2020 H2	0%	2%	3%	4%	2%	15%
2021 H1	-1%	0%	-1%	6%	4%	7%
2021 H2	-5%	-10%	-7%	11%	17%	12%
2022 H1	-1%	-14%	-9%	10%	20%	14%
2022 H2	4%	-5%	-4%	4%	6%	11%

High severity seen in £10k to £20k and £20k to £50k. Suggests change in mix of claims in these bands post whiplash reforms

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Industry Statistics – Excess TPI

Projected Excess TPI Results - Methodology

- We have maintained the same band definitions as previously for Excess TPI. The bands are defined as below in 2010 accident year years and indexed at 7% p.a.
  - £100 to £250k *(£526k in 2021 accident year)*
  - £250k to £500k *(£1.1k in 2021 accident year)*
  - £500k to £1m *(£2.1m in 2021 accident year)*
  - £1m to £2m *(£4.2m in 2021 accident year)*
  - £2m to £5m *(£10.5m in 2021 accident year)*
  - >£5m

- Projections undertaken by layer with companies grouped into two levels of case reserving strength.
- Open claims data at an Ogden -0.25% basis and hence results presented assuming future claim settlements are at Ogden -0.25%.
- In general, the development profile is based on data for the last few calendar years with calendar periods impacted by the Ogden rate change removed as well as some accident periods particularly impacted by COVID-19.
- For the > £5m layer there is a significant distortion from the change in Ogden rate and so chain-ladder models are no longer appropriate.
- Therefore the total TPI Excess has been projected in total by group.
- The >£5m layer is then calculated as the difference between the total and the sum of the other layers.
- Approach is mechanical with judgement generally limited.

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Industry Statistics – Excess TPI

Projected Excess TPI Results

Projected Ultimate Excess TPI Results for Private Car Comprehensive

Accident Period	Earned Exposure (millions of vehicle years)	Ultimate Excess TPI Claim Frequency (Non-nil claims per million vehicle years)	Ultimate Excess TPI Claim Severity (£)	Ultimate Excess TPI Burning Cost (£)	Year-on-Year Change in Frequency (% pa)	Year-on-Year Change in Severity (% pa)	Year-on-Year Change in Burning Cost (% pa)
2013	8.6	85	642,328	54.6	-0.3%	**36.1%**	**35.7%**
2014	11.7	65	693,051	45.0	**-23.5%**	7.9%	-17.5%
2015	12.6	59	720,553	42.5	-9.2%	4.0%	-5.6%
2016	13.6	59	854,785	50.2	-0.5%	18.6%	18.1%
2017	16.4	54	943,982	50.9	-8.2%	10.4%	1.4%
2018	18.7	51	852,534	43.1	-6.3%	-9.7%	-15.4%
2019	18.5	50	899,877	44.8	-1.6%	5.6%	3.9%
2020	18.3	40	1,115,097	44.2	**-20.4%**	**23.9%**	-1.4%
2021	18.3	39	1,106,731	42.6	-2.8%	-0.8%	-3.5%
2022	15.8	47	1,132,351	52.8	**21.1%**	2.3%	**23.9%**
Average (2015 to 2022)					-3.3%	6.7%	3.1%
Average (2017 to 2022)					-2.9%	3.7%	0.7%
Average (2019 to 2022)					-2.1%	8.0%	5.6%

Frequency in 2022 higher than 2020 and 2021 but still below pre-COVID19 levels.

Year-on-year severity is volatile but the averages are in the range 4% to 8% p.a. Some of this will be due to the change in Ogden rate.

Projections make no allowance for any other distortions in claim developments or experience such as more widespread COVID-19 impact or recent economic inflationary environment.

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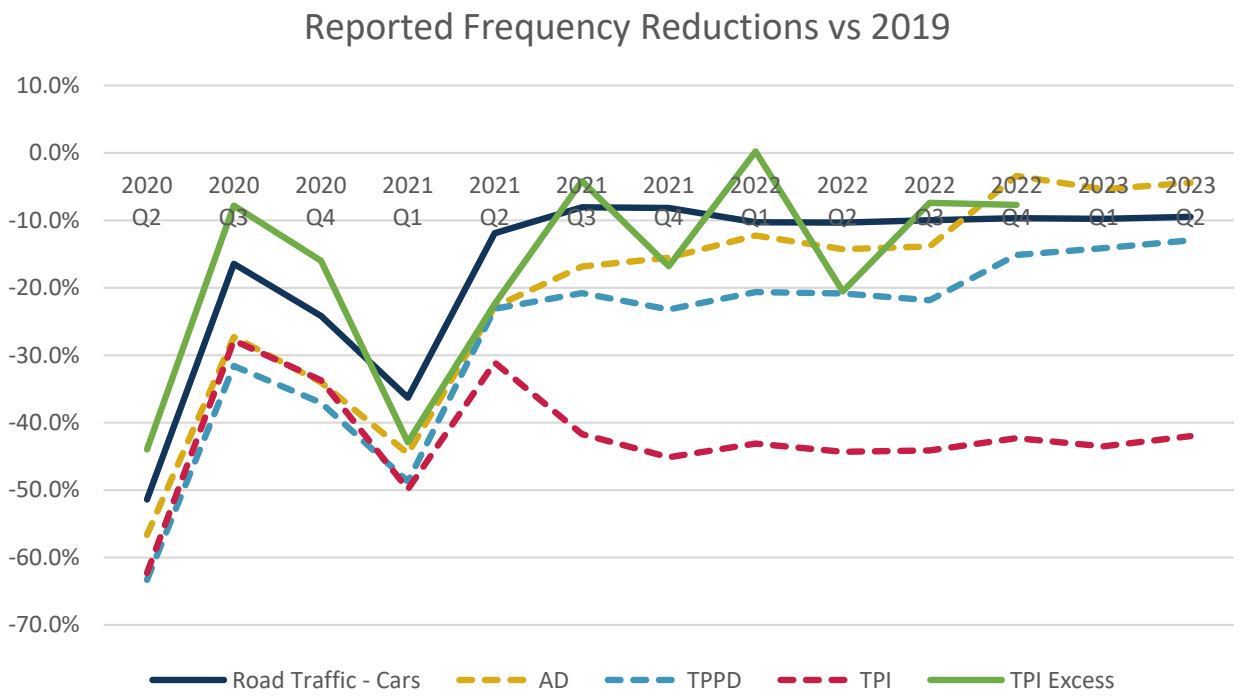
Industry Statistics - Excess TPI

Frequency



Accident Quarter	Change in Car Traffic	Change in TPI Frequency
2020 Q2	-51.4%	-44.0%
2020 Q3	-16.4%	-7.8%
2020 Q4	-24.2%	-16.0%
2021 Q1	-36.3%	-42.9%
2021 Q2	-11.9%	-22.4%
2021 Q3	-8.1%	-4.2%
2021 Q4	-8.2%	-16.8%
2022 Q1	-10.3%	0.2%
2022 Q2	-10.3%	-20.5%
2022 Q3	-10.0%	-7.4%
2022 Q4	-9.7%	-7.7%

- Reductions in TPI Excess frequency have generally been less than for other claims types.
- Across 2021 Q3 to 2022 Q4 the average reduction is 9% which is similar to the overall reduction in driving levels.

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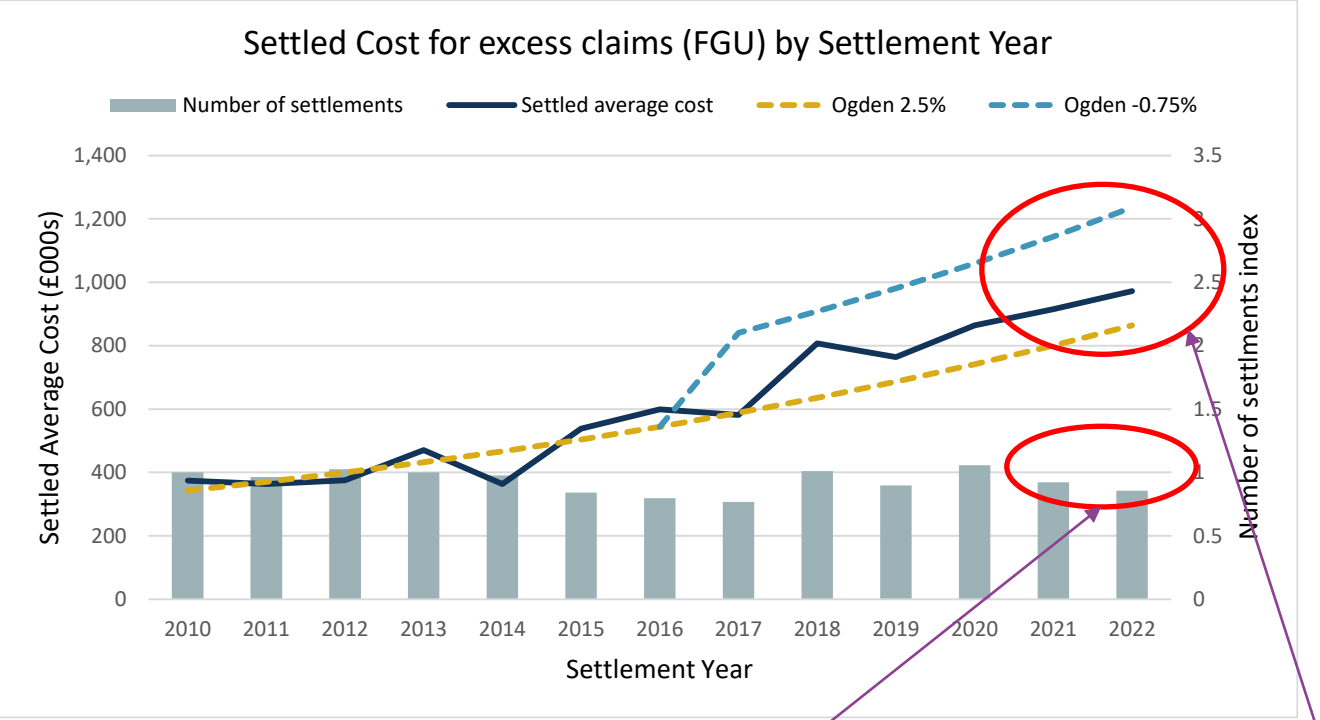
Source : Table TRA2503e; https://www.gov.uk/government/statistical-data-sets/tra25-quarterly-estimates

Industry Statistics – Excess TPI

Ogden – Settled average cost



- The graph shows the settled average cost of all excess claims by settlement year. Claims are defined as settled when paid is greater than 80% of incurred
- The dotted gold line shows a trend line fitted to the data from 2010 to 2016 and projected forward as an estimate of the expected Ogden 2.5% severity in 2017, 2018 and 2019. The fitted inflation rate is 8.0%.
- The blue dotted line is the gold line uplifted by 43%, the estimated impact from Ogden 2.5% to Ogden -0.75% from last year's study.
- The grey bars are the number of settlements in the data indexed to 2010.

Number of settlements in 2022 lower than in 2021.

Actual settled severity in 2022 was 6.2% higher than in 2021.

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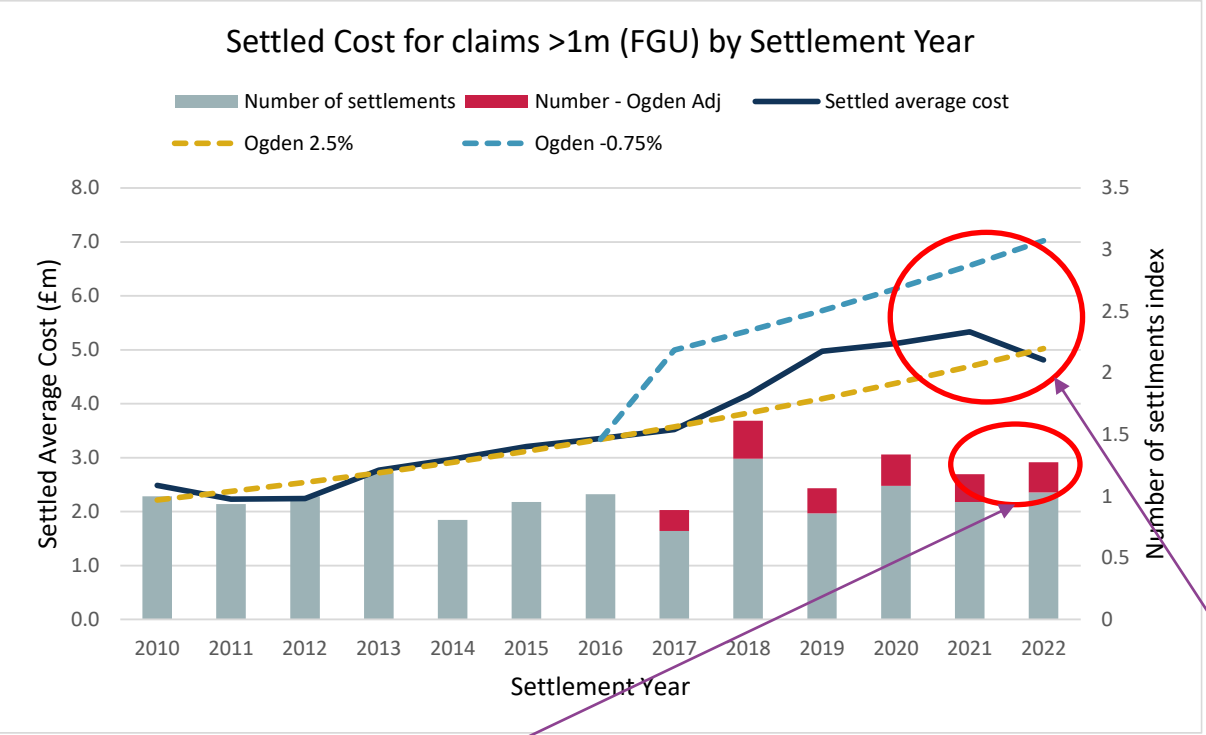
Industry Statistics – Excess TPI

Ogden – Settled average cost



- The graph shows the settled average cost of claims greater than £1m by settlement year.
- The estimated Ogden uplift to severity is 40% (from last year's study). This allows for the fact that at Ogden -0.75% there are more claims above £1m than at Ogden 2.5%.
- The red bars are the proportion of additional claims due to the change in Ogden rate to -0.75%.

Level of settlements in 2022 higher than for 2021.

Actual settled severity in 2022 is 10% lower than in 2021. The number of claims settled in the >£5m band was 30% lower in 2022 than 2021

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Conclusions

Accident Year	Burning Cost (£)				
	AD	TPD	Capped TPI	Excess TPI*	Total AD + TP
2013	47	68	124	55	293
2014	51	71	97	45	264
2015	56	74	89	43	262
2016	60	79	85	50	274
2017	61	81	77	51	270
2018	69	90	78	43	281
2019	69	93	79	45	286
2020	54	66	56	44	220
2021	69	82	48	43	241
2022	94	105	48	53	300

**Note – Excess TPI burning cost assumes future claims settle at Ogden -0.25%.*

- Damage frequencies increased in 2022 as the levels of driving increased following COVID-19.
- AD severity inflation averaging 16% from 2022 Q3 to 2023 Q2. TPPD severity inflation averaging 10% on an incurred basis and 16% on a settled basis from 2022 Q3 to 2023 Q2.
- TPI to TPPD ratio fell by 29% following introduction of the whiplash reforms with further reductions also seen in 2022 Q3 to 2023 Q2. Whiplash reforms severity benefit of around 5% seen in data to date.
- Implied whiplash reforms benefit of around £16 per policy (although this is heavily reliant on companies' approach to case reserving whiplash claims).
- TPI Excess frequency in 2022 higher than 2020 and 2021 but still below pre-COVID19 levels.
- The burning cost in 2022 is estimated to increase by 7% or £59 per policy.

Projections based on data as at 31 December 2022 and make no allowance for any distortions in claim developments or experience due to COVID-19, whiplash reforms or recent economic inflationary environment other than that already within the claims data.

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Conclusions

- Claims inflation
  - Damage inflation shows no sign of reducing in 2023 H1.
  - Inflation continues to impact claim development trends on TPPD.
- Back to stability post COVID-19?
  - Overall levels of miles driven have been relatively stable for around two years at around 10% below pre-pandemic levels. However, claims experience does not appear to have reached a similar levels of stability with AD and TPPD frequency seeing increases in 2022 Q4 to 2023 Q1.
  - Some changes observed during the pandemic appear to have persisted:
    - Settlement rates remain slow in 2023 H1 with no evidence of speeding up to date;
    - Increased cyclist mileage although not to the extent seen in 2020;
    - Increasing age of car park as new registrations have reduced; and
    - Reduction in proportion of young people holding licences.
  - However, the distribution of accidents in 2022 looks similar to pre-pandemic particularly for the morning and evening rush hours.

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Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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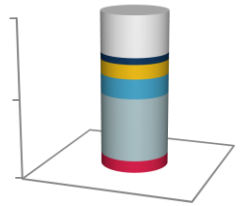
Appendix – TPI Capped

Type 1 KPIs



Private Car ComprehensiveTPI Capped Results in Layer (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 5k	£5k - 10k	£10k - 20k	£20k - 50k	£50k - £100k	<100k
Frequency exc Nils (in layer and above) (claims per million vehicle years)							
2013	15,244	13,447	7,093	3,152	981	222	15,244
2014	11,896	10,502	5,516	2,402	702	170	11,896
2015	11,163	9,885	5,041	2,080	595	156	11,163
2016	10,436	9,175	4,686	1,915	552	160	10,436
2017	9,266	8,167	4,015	1,630	482	146	9,266
2018	9,397	8,298	4,001	1,602	483	148	9,397
2019	9,329	8,161	3,877	1,583	494	151	9,329
2020	6,235	5,358	2,617	1,090	358	115	6,235
2021	5,414	4,311	2,021	824	318	118	5,414
2022	5,581	4,414	1,780	683	306	129	5,581
Average Cost (£)							
2013	955	3,235	3,483	5,827	13,706	42,301	8,132
2014	963	3,259	3,483	5,693	14,057	47,660	8,114
2015	975	3,265	3,434	5,680	14,802	51,094	7,978
2016	980	3,317	3,460	5,742	15,629	55,512	8,179
2017	990	3,332	3,487	5,813	16,094	61,491	8,269
2018	997	3,355	3,498	5,932	16,460	64,342	8,321
2019	1,001	3,350	3,548	6,099	16,652	69,189	8,444
2020	999	3,379	3,616	6,299	17,074	78,186	8,947
2021	971	3,205	3,472	6,797	18,913	85,752	8,833
2022	983	2,885	3,241	7,300	21,285	95,966	8,577
Burning Cost (£)							
2013	14.6	43.5	24.7	18.4	13.4	9.4	124.0
2014	11.5	34.2	19.2	13.7	9.9	8.1	96.5
2015	10.9	32.3	17.3	11.8	8.8	8.0	89.1
2016	10.2	30.4	16.2	11.0	8.6	8.9	85.4
2017	9.2	27.2	14.0	9.5	7.8	9.0	76.6
2018	9.4	27.8	14.0	9.5	8.0	9.5	78.2
2019	9.3	27.3	13.8	9.7	8.2	10.5	78.8
2020	6.2	18.1	9.5	6.9	6.1	9.0	55.8
2021	5.3	13.8	7.0	5.6	6.0	10.1	47.8
2022	5.5	12.7	5.8	5.0	6.5	12.4	47.9

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Appendix – TPI Capped

Type 2 KPIs

Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 5k	£5k - 10k	£10k - 20k	£20k - 50k	£50k to £100k	< 100k
Frequency exc Nils (claims per million policy years)							
2013	1,797	6,355	3,941	2,171	759	137	15,159
2014	1,394	4,986	3,114	1,699	533	105	11,831
2015	1,278	4,843	2,961	1,486	439	97	11,104
2016	1,260	4,490	2,771	1,363	393	101	10,377
2017	1,099	4,152	2,386	1,147	336	92	9,212
2018	1,099	4,297	2,399	1,119	335	98	9,347
2019	1,168	4,284	2,294	1,089	343	102	9,279
2020	877	2,741	1,528	732	242	76	6,195
2021	1,104	2,290	1,197	506	201	79	5,376
2022	1,167	2,634	1,097	376	178	82	5,534
Average Cost (£)							
2013	395	3,277	7,300	14,108	29,284	88,097	7,600
2014	380	3,300	7,359	14,151	29,407	96,977	7,587
2015	391	3,338	7,409	14,258	29,877	102,758	7,462
2016	385	3,409	7,490	14,382	30,267	110,006	7,625
2017	377	3,479	7,568	14,473	30,532	119,698	7,690
2018	344	3,528	7,632	14,645	31,033	123,764	7,781
2019	350	3,516	7,691	14,840	31,386	130,976	7,903
2020	351	3,490	7,778	15,026	31,519	145,420	8,298
2021	408	3,210	7,600	15,209	32,672	156,080	8,096
2022	437	2,915	7,387	15,335	34,728	174,753	7,700
Burning Cost (£)							
2013	0.7	20.8	28.8	30.6	22.2	12.1	115.2
2014	0.5	16.5	22.9	24.0	15.7	10.1	89.8
2015	0.5	16.2	21.9	21.2	13.1	10.0	82.9
2016	0.5	15.3	20.8	19.6	11.9	11.1	79.1
2017	0.4	14.4	18.1	16.6	10.3	11.1	70.8
2018	0.4	15.2	18.3	16.4	10.4	12.1	72.7
2019	0.4	15.1	17.6	16.2	10.8	13.3	73.3
2020	0.3	9.6	11.9	11.0	7.6	11.0	51.4
2021	0.4	7.4	9.1	7.7	6.6	12.4	43.5
2022	0.5	7.7	8.1	5.8	6.2	14.4	42.6

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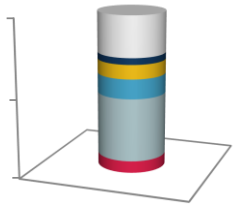
Appendix – TPI Excess

Type 1 KPIs



Private Car ComprehensiveTPI Capped Results in Layer (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m	>100k
Frequency exc Nils (in layer and above) (claims per million vehicle years)							
2013	84.9	30.8	15.7	8.8	4.6	2.3	84.9
2014	65.0	27.0	13.8	7.9	4.4	1.3	65.0
2015	59.0	23.6	11.8	6.3	3.8	1.3	59.0
2016	58.7	25.0	13.1	7.4	4.8	1.5	58.7
2017	53.9	25.2	14.8	8.0	4.0	1.2	53.9
2018	50.5	21.9	11.7	6.1	3.3	1.0	50.5
2019	49.8	20.5	10.8	6.3	3.3	1.2	49.8
2020	39.6	18.2	10.0	5.8	3.2	1.2	39.6
2021	38.5	17.4	9.2	4.9	2.9	1.0	38.5
2022	46.6	19.6	10.4	6.0	3.3	1.2	46.6
Average Cost (£000s)							
2013	107	210	444	874	2,572	5,325	642
2014	125	233	480	934	2,394	4,856	693
2015	130	243	515	1,077	2,612	4,647	721
2016	140	264	572	1,198	2,415	5,000	855
2017	160	302	564	1,097	2,683	5,655	944
2018	166	307	588	1,220	2,514	5,340	853
2019	170	323	693	1,285	3,013	3,445	900
2020	188	352	747	1,450	3,367	3,173	1,115
2021	204	382	766	1,485	3,296	4,221	1,107
2022	214	409	842	1,573	3,019	5,648	1,132
Burning Cost (£)							
2013	9.1	6.4	7.0	7.7	11.9	12.4	54.6
2014	8.1	6.3	6.6	7.3	10.4	6.2	45.0
2015	7.7	5.7	6.1	6.8	9.9	6.3	42.5
2016	8.2	6.6	7.5	8.9	11.6	7.4	50.2
2017	8.6	7.6	8.3	8.8	10.6	6.9	50.9
2018	8.4	6.7	6.9	7.5	8.2	5.4	43.1
2019	8.5	6.6	7.5	8.0	9.9	4.3	44.8
2020	7.4	6.4	7.5	8.5	10.7	3.7	44.2
2021	7.9	6.6	7.1	7.3	9.7	4.1	42.6
2022	10.0	8.0	8.7	9.4	9.9	6.7	52.8

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Appendix – TPI Excess

Type 2 KPIs

Private Car Comprehensive Excess TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m
Frequency exc Nils (finishing in layer) (claims per million policy years)						
2013	54.2	15.1	6.9	4.2	2.3	2.3
2014	38.0	13.1	6.0	3.5	3.1	1.3
2015	35.4	11.8	5.5	2.5	2.5	1.3
2016	33.7	11.9	5.7	2.6	3.3	1.5
2017	28.7	10.4	6.8	4.0	2.7	1.2
2018	28.6	10.2	5.6	2.9	2.2	1.0
2019	29.3	9.6	4.6	3.0	2.0	1.2
2020	21.4	8.1	4.2	2.7	2.0	1.2
2021	21.1	8.2	4.3	2.0	2.0	1.0
2022	27.0	9.2	4.4	2.7	2.1	1.2
Average Cost (£000s)						
2013	187	415	839	1,709	3,920	11,450
2014	206	460	906	1,776	4,374	11,410
2015	217	486	999	1,990	4,542	11,659
2016	227	516	1,090	2,137	4,496	12,504
2017	250	562	1,087	2,203	4,942	13,684
2018	267	596	1,150	2,375	4,752	13,931
2019	280	629	1,303	2,509	5,176	12,638
2020	293	673	1,399	2,795	5,858	13,008
2021	322	746	1,491	2,670	6,009	14,745
2022	349	799	1,578	3,006	5,399	16,909
Burning Cost (£)						
2013	10.1	6.3	5.7	7.1	9.1	26.6
2014	7.8	6.0	5.4	6.2	13.4	14.6
2015	7.7	5.7	5.5	5.0	11.2	15.7
2016	7.6	6.1	6.2	5.6	15.0	18.4
2017	7.2	5.9	7.4	8.9	13.5	16.7
2018	7.7	6.0	6.5	6.8	10.6	14.1
2019	8.2	6.1	6.0	7.4	10.6	15.7
2020	6.3	5.5	5.8	7.4	11.9	15.0
2021	6.8	6.1	6.4	5.3	11.8	14.3
2022	9.4	7.4	6.9	8.2	11.3	20.1

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Thank you