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Update from the Third Party Working Party

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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.



Third Party Working Party

- Twelfth 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 2020 of £8.1 billion for private car comprehensive.
- This pack contains this year's research to be presented at the GIRO conference in November 2021.



Acknowledgements

Working Party:

Paulvir Bajwa
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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.





1. Market Environment

2. Industry Statistics

- AD
- TPPD
- Capped TPI
- Excess TPI
- Geographic

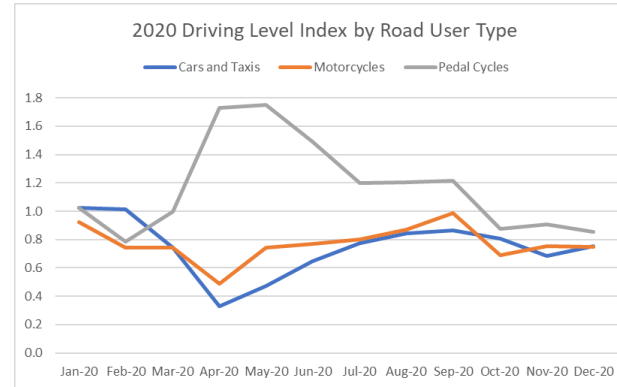
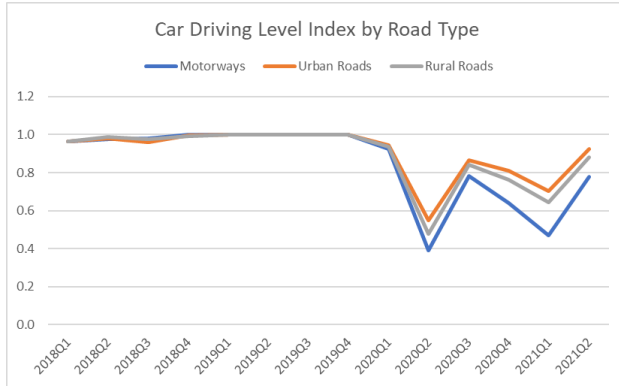
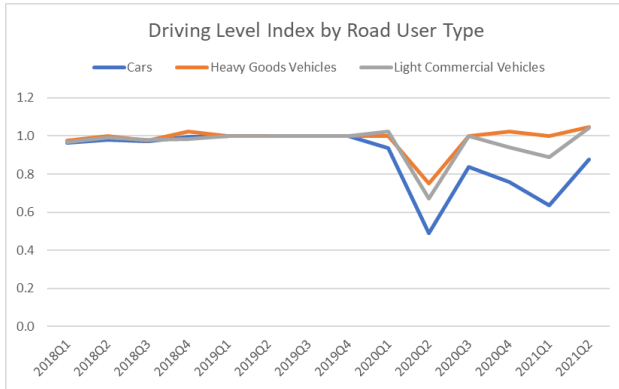
3. Conclusions

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Expertise
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Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Supporting

Market environment

Impact of Covid-19 pandemic on driving levels

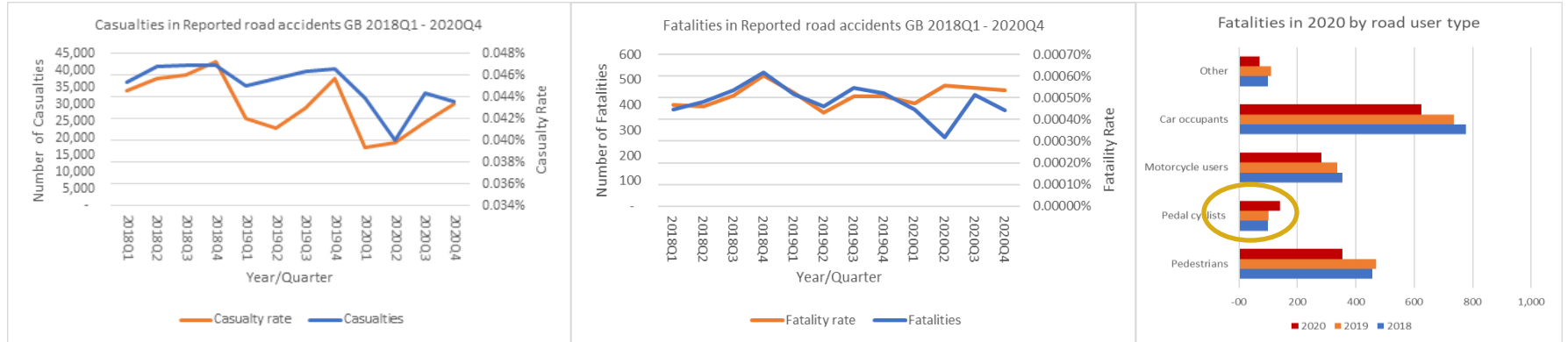


- There has been a material reduction in vehicle miles driven during the COVID-19 pandemic, particularly during 2020Q2 and 2021Q1.
- Car miles reduced more than commercial vehicle miles, and motorway miles reduced more than other road type miles.
- There has been a significant increase to pedal cycle miles in 2020, although these appear to have returned to normal by the end of the year.
- Indices presented are relative to the equivalent month or quarter in 2019.



Market environment

Casualty, Fatality and Mileage Statistics (per Vehicle Mile)



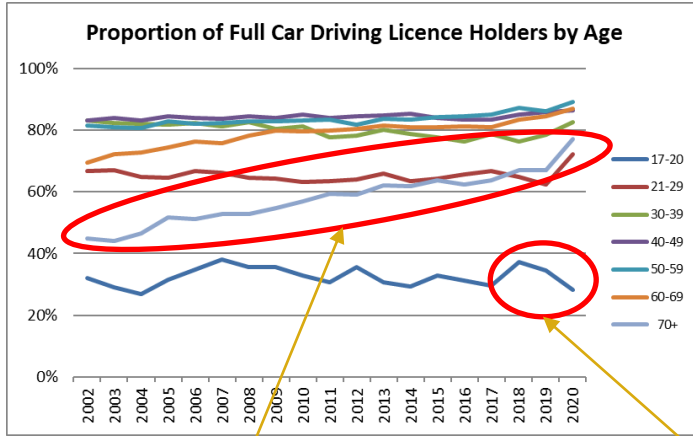
- There were 1,472 reported road deaths in 2020, a reduction of 280 deaths (or 16%) from 2019. There were also 115,333 casualties in reported road traffic accidents, a decrease of 25% compared to 2019.
- The vehicle miles driven was 21% lower in 2020 than 2019. Therefore 2020 saw the rate of casualties per mile decrease compared to 2019 but the rate of fatalities per mile increase by 6%.
- All road user types saw a reduction in the number of fatalities in 2020 with the exception of pedal cyclists which saw a 40% increase in fatalities suggesting that the increase in pedal cyclists in 2020 was driving the increase in fatality rates.



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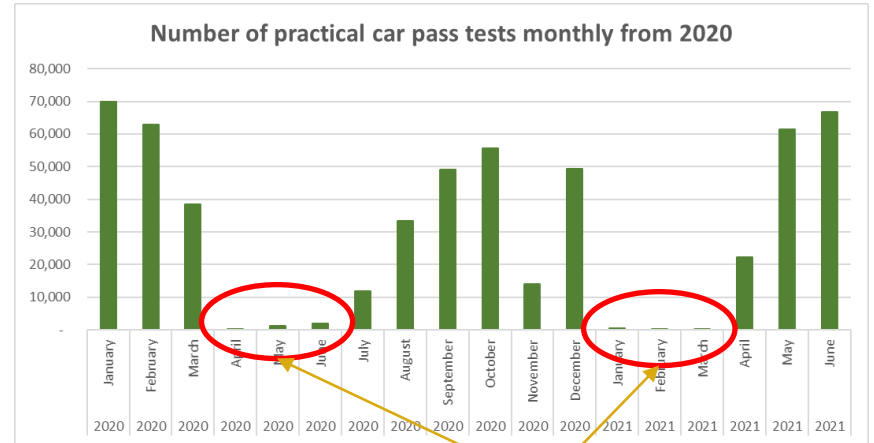
Market environment

Changing driving habits



National Travel Survey data shows proportion of those over 70 with a full car licence has increased from 45% to over 70% from 2002 to 2020

The proportion of 17-20 year olds with a full car licence shows some early evidence of a reduction in 2020.



The number of driving test passes has roughly halved in 2020 and 2021. The number of passes has not changed by gender, nor has the pass rate itself changed during this period.



2021 Market Environment

Driving habits and the reduction of Rush Hour traffic?

This graphic shows differences between the distributions of accidents on weekdays and weekends during the first lockdown relative to the same period in 2019.

Key observations are:

- Weekday morning accidents occurred less, perhaps due to increased working from home.
- Weekday accidents were more concentrated in the late-morning to early-afternoon, but there is still a concentration during the after-work rush hours.
- Early hours of the weekend had slightly fewer accidents, perhaps due to restricted nightlife activities.

The longer term impact of the pandemic in the 'new normal' is still unknown.

Distribution of accidents measured between March 23 - June 30						
Time	Weekdays			Weekends		
	2019	2020	Change	2019	2020	Change
12am-8am	7.6%	7.3%	-0.4%	3.7%	2.6%	-1.1%
8am-9am	5.9%	3.0%	-2.9%	0.7%	0.5%	-0.2%
9am-10am	3.6%	2.7%	-0.9%	0.9%	0.8%	-0.1%
10am-11am	3.2%	3.2%	0.0%	1.3%	1.1%	-0.2%
11am-12pm	3.5%	4.0%	0.5%	1.8%	1.5%	-0.4%
12pm-1pm	4.0%	4.7%	0.8%	2.1%	1.7%	-0.4%
1pm-2pm	4.4%	5.3%	1.0%	2.1%	2.0%	-0.1%
2pm-3pm	4.3%	5.5%	1.2%	1.9%	2.1%	0.2%
3pm-4pm	6.2%	6.1%	0.0%	2.0%	2.1%	0.1%
4pm-5pm	6.7%	6.9%	0.2%	1.8%	2.2%	0.4%
5pm-6pm	6.9%	6.6%	-0.3%	1.7%	1.9%	0.2%
6pm-7pm	5.2%	5.9%	0.7%	1.7%	1.8%	0.2%
7pm-12am	11.7%	13.1%	1.3%	5.0%	5.2%	0.2%

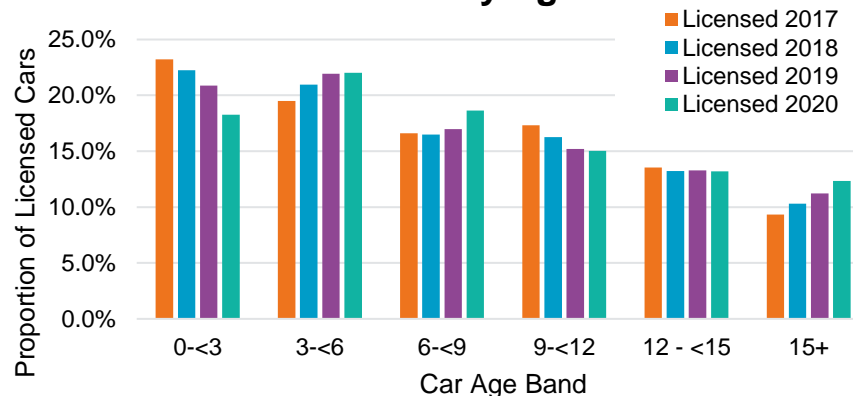


2021 Market Environment

Car park

- Trend towards vehicles aged between 3-6 years as new car sales are falling, resulting in an increasing average licensed vehicle age. There is also an increasing proportion of vehicles in the 15+ years category.
- In addition, in 2020 the total number of new car registrations fell 29% compared to 2019, with COVID-19 most likely exacerbating the observed trend in declining new vehicle registrations.
- ULEV (Ultra Low Emission Vehicles) cars form an increasing proportion of new registrations. In 2020, 10% of new car registrations were ULEV, compared to 3% in 2019.
- ULEV cars represent a small proportion of total cars on the road. However, they have increased as a proportion of total cars on the road, from 0.3% in 2016 to 1.2% in 2020.

Licensed Cars by Age Band



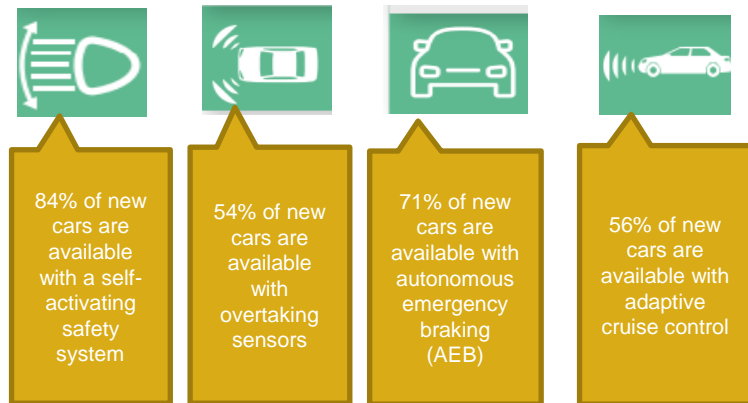
	2016	2017	2018	2019	2020
Total cars registered in year (m)	2.7	2.6	2.4	2.3	1.7
Of which are ULEV cars	1.5%	2.0%	2.5%	3.1%	10.3%
Total registered cars (m)	31.8	32.2	32.5	32.9	32.7
Of which are ULEV cars	0.3%	0.4%	0.6%	0.8%	1.2%



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Market Environment

Advanced driving assistance systems (ADAS)



Projections

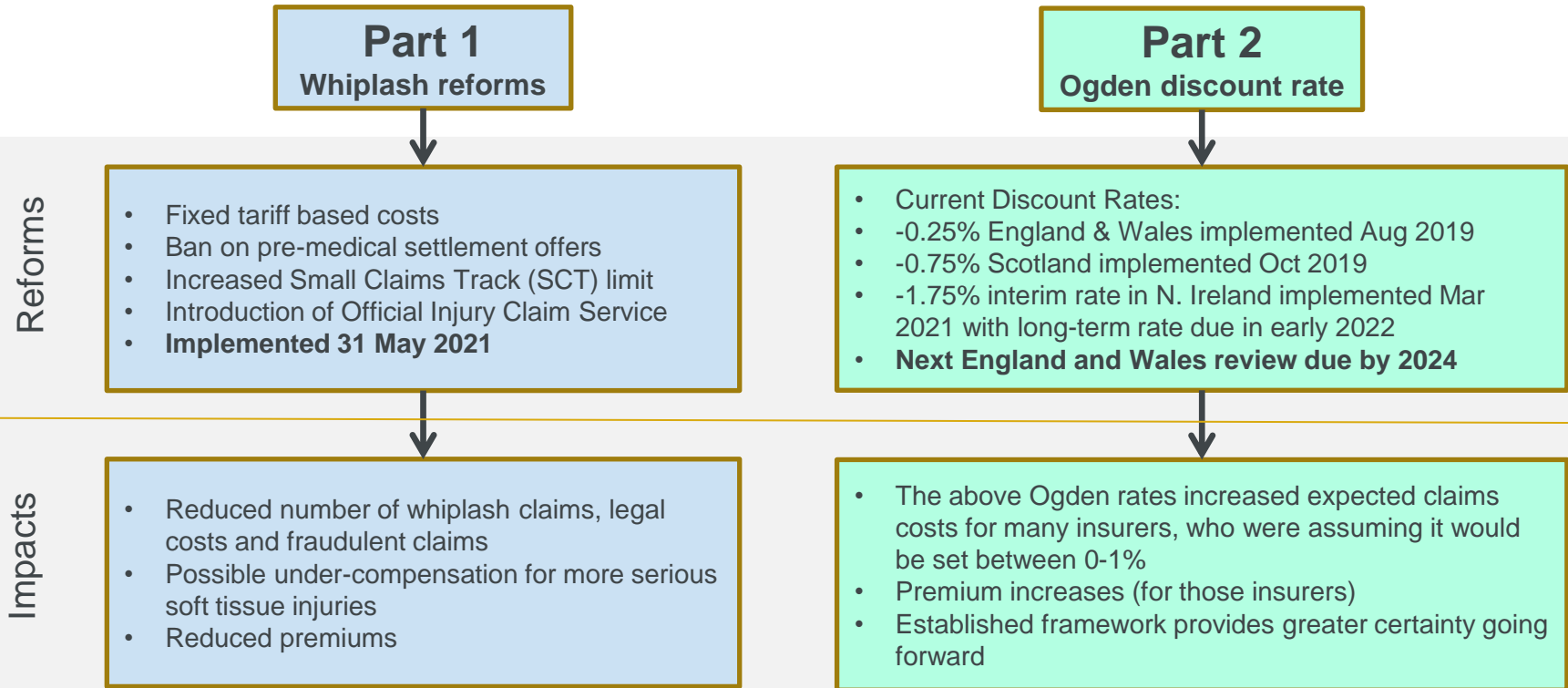
- The number of vehicles on UK roads that have ADAS fitted continues to increase, reaching 4.5 million (circa 12% of UK car park) in July 2020. (Thatcham research)
- By 2035, it is expected that front-to-rear AEB will be the first component of ADAS technology to reach near 100% fitment on UK roads.
- According to SMMT, in the period 2019-2030 ADAS technology will prevent 3,900 deaths and avoid 47,000 serious accidents in the UK.
- Circa 26% improvement in accident frequency observed by Thatcham in vehicles fitted with AEB.
- ADAS and Automation is expected to drive down overall UK crash claim frequency by 16% by 2025 and 38% by 2035.

- ADAS technology continues to push up repair costs; prices increased by 40% over a six year period, increasing from £1366 in 2013 to £1919 in 2019 (Motor Trader, November 2019).
- “Bent metal” repair costs are expected to continue increasing due to the cost of replacing complex parts.
- However, Thatcham believe that overall claims cost is expected to reduce by circa 5% by 2025 and 10% by 2035 as a consequence of reduced speed of impact (and thus lighter damage) due to ADAS and related technology.



Market Environment

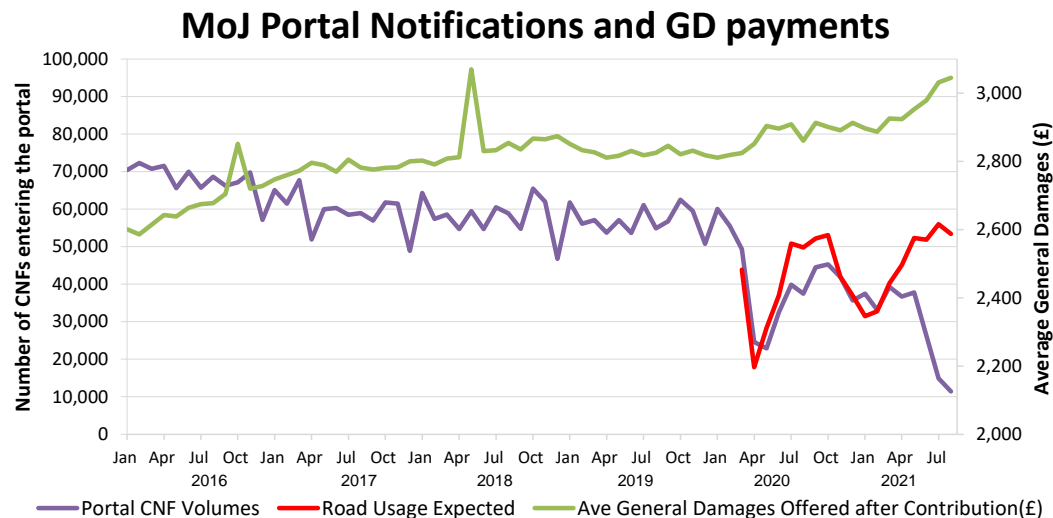
Whiplash Reforms and Ogden Discount Rate



Market Environment

MoJ Portal Notifications and General Damages payments

- During the lockdowns the number of claims submitted through the portal fell roughly in line with that expected based on road usage.
- Road usage continues to recover towards the pre-pandemic levels. But under the Whiplash Reforms, a new portal has been set up for low value claims: 'Official Injury Claim'. This has led to further reductions in MoJ portal notifications.
- The average General Damages settlement has increased, since low value claims are now being submitted to Official Injury Claim. Past increases had been in line with changes in the JC guidelines (see table).



JCB Edition	Month Published	Average Uplift
10 th	Sep 2010	2.8%
11 th	Sep 2012	9.0%
Laspo	Apr 2013	10.0%
12 th	Sep 2013	2.3%
13 th	Sep 2015	4.7%
14 th	Sep 2017	4.8%
15 th	Nov 2019	7.0%

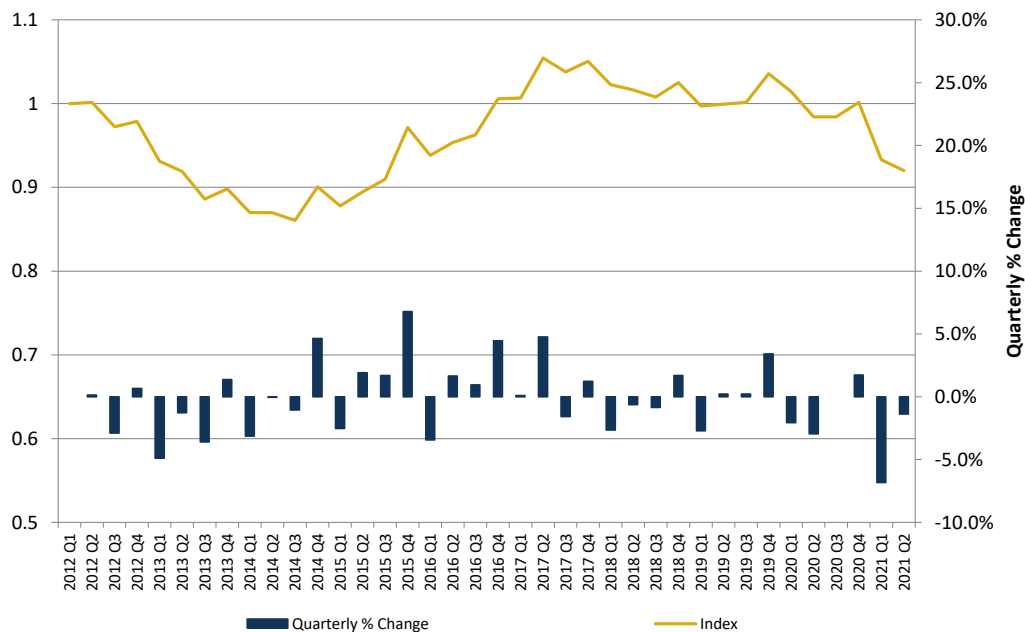


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Market Environment

Premium Rates

ABI Premium Tracker (exc IPT)



- Premium rates fairly level during 2020 at around £420 exc IPT.
- Premium rates have fallen sharply in 2021 with rates in 2021 Q2 6.5% lower than in 2020 Q2.
- Current premium rates approximately the same as in 2015 Q3.
- On an earned basis, premiums in 2020 were 0.2% lower than in 2019.

Market Environment

Insurer Commentary

2020 – Record year as a result of lockdowns

The UK motor insurance market recorded its best underwriting profit since records began in 2020, with a Net Combined Ratio (NCR) of 90.3%... The profitable NCR was principally driven by the COVID-19 lockdowns which resulted in a **20% fall in vehicle usage** and a subsequent **28% drop in the number of motor claims**.

Source: EY press release June 2021

Motor insurers benefitted from **significant reductions in claims frequency** as a result of the **lockdowns**.

Source: Fitch Ratings UK Non-Life dashboard – 2020 results

H1 2021 – Favourable experience in H1 but potential headwinds as lockdowns ease

"Motor claims frequencies... **have remained below 2019 levels...** The average cost of claims **continues to rise, reflecting inflationary trends.**"

Source Hastings H1 2021 report

"Operating profit increased to £420 million (HY20 £79 million) owing to... **frequency benefits in motor lines** from reduced economic activity caused by COVID-19."

Source: Aviva H1 2021 results

"Significant profit growth of £229.5 million in UK Insurance, primarily attributable to favourable development in prior year loss ratios and a reduced current year loss ratio for UK Motor... **Underlying market inflation persists**, driven by higher parts costs due to advances in vehicle technology and higher used car prices

Admiral H1 2021 results

Motor's current-year attritional loss ratio was relatively stable... driven by **claims frequency remaining below normal levels....** In July, claims frequency returned close to the level assumed in our pricing and consequently we expect our Motor current-year attritional loss ratio in H2 to return closer to underlying 2020 levels

Source: Direct Line H1 2021 results

"Continued **strong net result** and overall COR... driven by the **lower frequency of motor claims** as a result of the **pandemic lockdown restrictions** at the start of the year...".

Source: Ageas H1 2021 results

Premium rate cuts in Q1 2021 and the upcoming FCA pricing reforms will contribute to this profitability being short-lived... EY predicts that the **Net Combined Ratio (NCR) for 2021 will be 103%....**

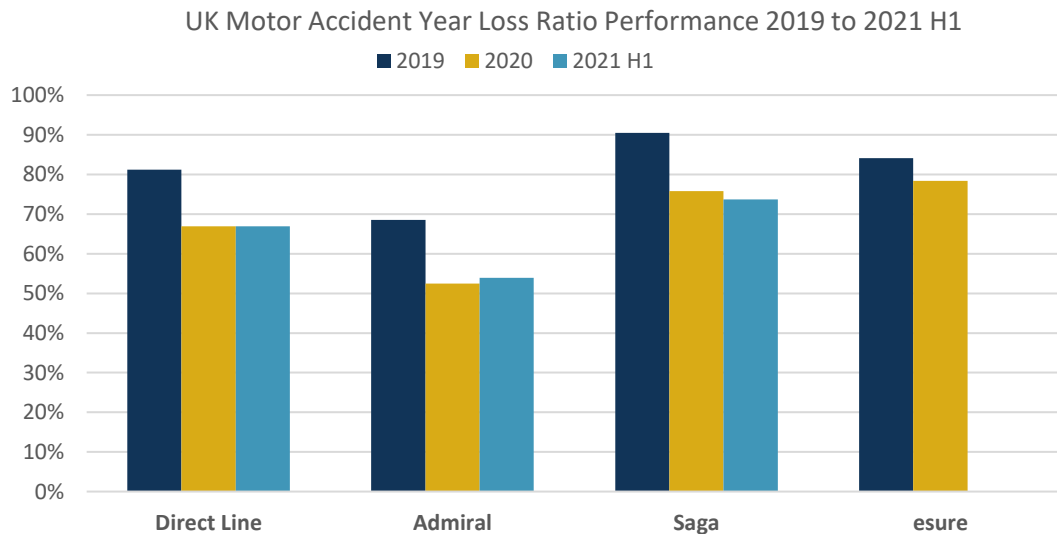
Source: EY press release June 2021



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Market Environment

Company performance



- All companies saw a significant reduction in loss ratio in 2020 compared to 2019 as a result of falling frequencies due to COVID-19.
- esure had the lowest fall in loss ratio in 2020 at 6% points with Admiral the largest at 16% points.
- Loss ratios in the first half of 2021 were broadly similar to the 2020 loss ratios.

Note : Loss ratios derived from published company accounts and exclude prior year movements.
esure did not publish 2021 H1 results.



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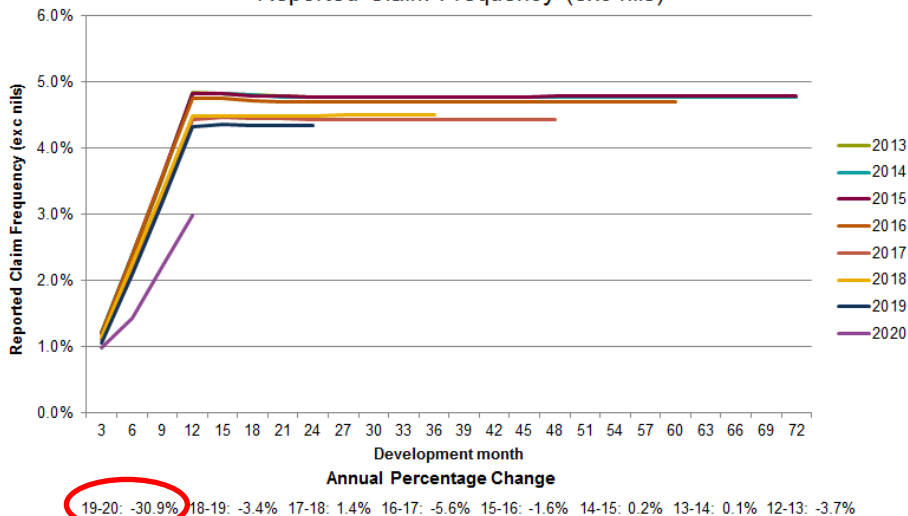
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Supporting

Industry Statistics - AD Frequency

Private Car Comp - AD
Reported Claim Frequency (exc nils)



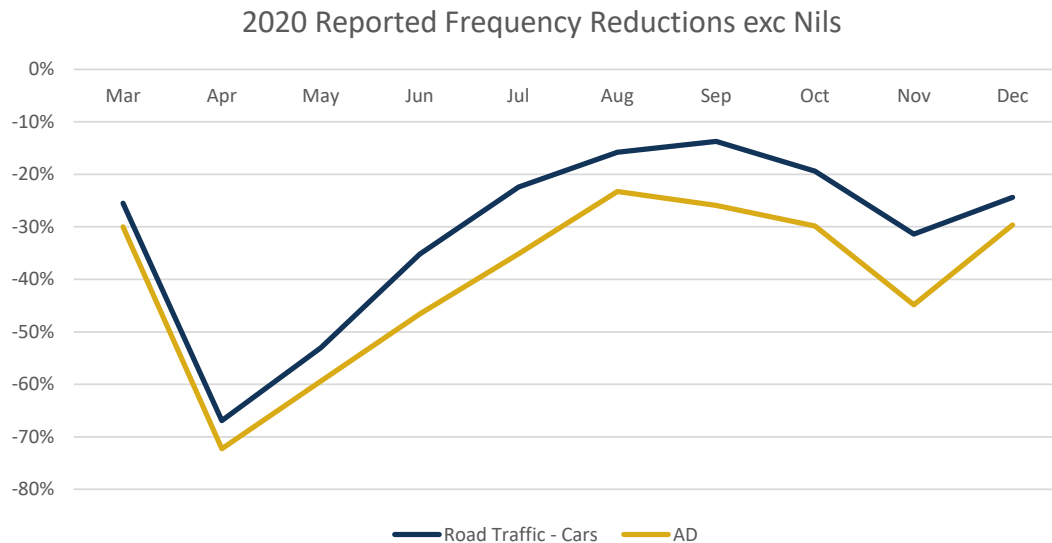
Frequency reduced by 30.9% in 2020.

Accident Quarter	Change in AD Frequency exc nils
2020 Q1	-9.8%
2020 Q2	-54.5%
2020 Q3	-27.0%
2020 Q4	-33.6%

2020 Q2 saw biggest reduction with frequency reducing by over 50%.



Industry Statistics - AD Frequency



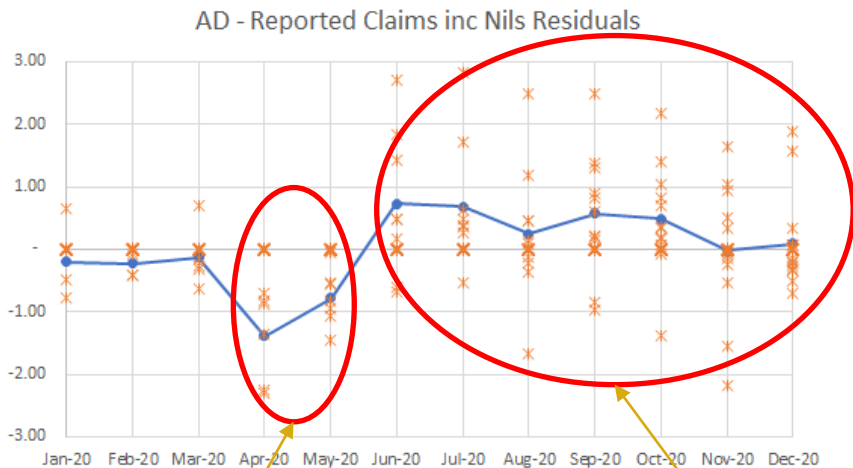
Accident Month	Change in Car Traffic	Change in AD Frequency exc nils
Mar	-25.5%	-30.0%
Apr	-66.9%	-72.3%
May	-53.0%	-59.4%
Jun	-35.2%	-46.6%
Jul	-22.4%	-35.1%
Aug	-15.8%	-23.3%
Sep	-13.7%	-25.9%
Oct	-19.4%	-29.8%
Nov	-31.4%	-44.8%
Dec	-24.4%	-29.6%

- Reduction in AD frequency around 15% larger than the reduction in car traffic volumes.



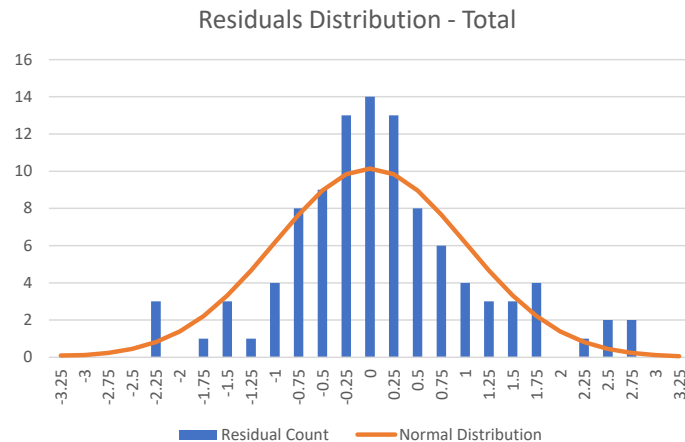
Industry Statistics - AD Reporting

- We have investigated reporting delays by considering link ratio residuals during calendar year 2020 vs the 2019 calendar year development pattern.



Significant slowdown in reporting in April and May

Catch-up in reporting from June onwards with November and December back to normal.

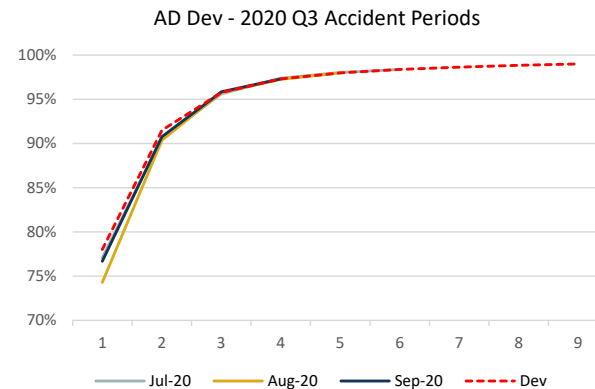
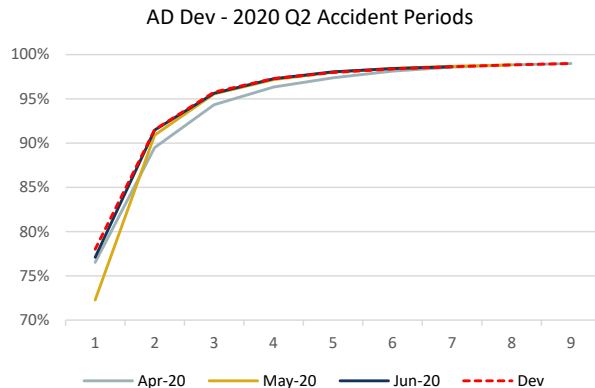
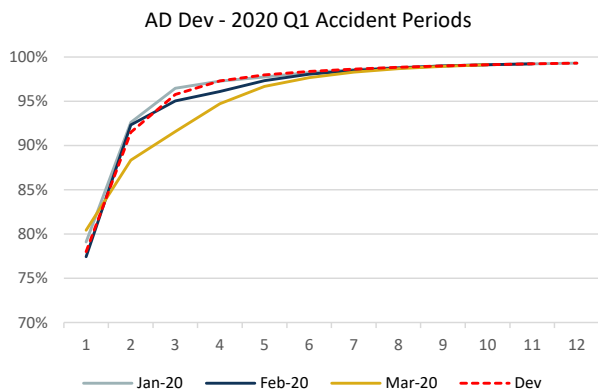


Overall distribution of residuals supports reporting patterns back to normal



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Industry Statistics - AD Reporting



February and March show significantly slower development patterns than historical trends.

April and May also develop slower than historical trend.

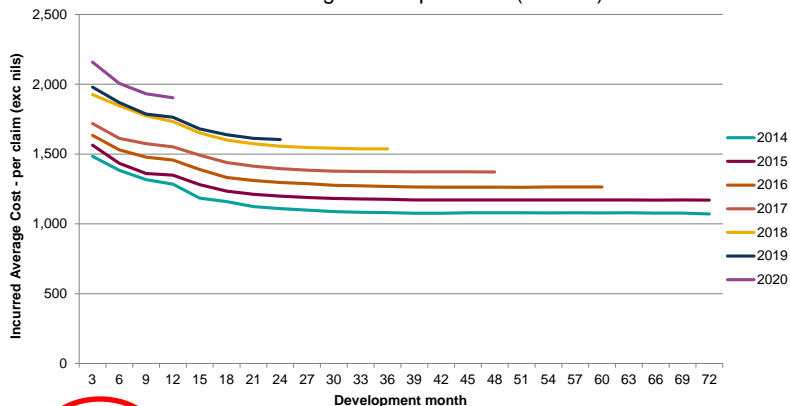
2020 Q3 reporting patterns appear more normal.

- Note – these graphs assume development from as at date of data (31 December 2020) is consistent with pre-COVID-19 data.



Industry Statistics - AD Severity

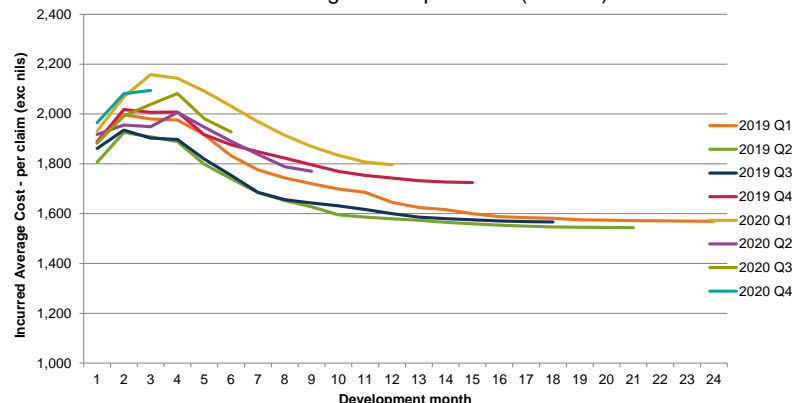
Private Car Comp - AD
Incurred Average Cost - per claim (exc nils)



19-20: 7.9% 18-19: 3.1% 17-18: 11.8% 16-17: 8.7% 15-16: 7.9% 14-15: 9.2% 13-14: 4.6% 12-13: 0.6%

Severity inflation in 2020 of 7.9%

Private Car Comp - AD
Incurred Average Cost - per claim (exc nils)



Q4: 4.4% Q3: 9.9% Q2: 8.8% Q1: 9.1%

Bigger severity impacts for first three quarters of 2020



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Industry Statistics - AD

Projected AD Results

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)
2009	15.8	73,391	1,520	38.9%	929	68.2	11.4%	3.4%	5.3%	0.2%	11.7%
2010	15.8	61,409	1,588	40.2%	949	58.3	-16.3%	4.5%	3.5%	2.2%	-14.5%
2011	17.6	52,453	1,606	41.1%	946	49.6	-14.6%	1.1%	2.2%	-0.3%	-14.9%
2012	17.7	49,952	1,718	41.5%	1,005	50.2	-4.8%	6.9%	1.0%	6.2%	1.2%
2013	17.6	48,069	1,760	42.6%	1,010	48.5	-3.8%	2.4%	2.7%	0.5%	-3.3%
2014	17.8	48,147	1,863	43.3%	1,057	50.9	0.2%	5.9%	1.5%	4.7%	4.9%
2015	18.5	48,285	1,999	42.4%	1,153	55.7	0.3%	7.3%	-2.1%	9.0%	9.3%
2016	19.6	47,399	2,207	43.7%	1,243	58.9	-1.8%	10.4%	3.2%	7.8%	5.8%
2017	20.2	44,665	2,422	44.2%	1,351	60.3	-5.8%	9.7%	1.2%	8.7%	2.4%
2018	20.6	45,233	2,661	43.2%	1,512	68.4	1.3%	9.8%	-2.4%	11.9%	13.3%
2019	20.5	43,688	2,807	44.7%	1,552	67.8	-3.4%	5.5%	3.5%	2.7%	-0.8%
2020	20.0	30,140	2,976	44.2%	1,661	50.1	-31.0%	6.0%	-1.2%	7.0%	-26.2%
Average (2013 to 2020)							-6.5%	7.8%	0.5%	7.4%	0.4%
Average (2015 to 2020)							-9.0%	8.3%	0.9%	7.6%	-2.1%
Average (2017 to 2020)							-12.3%	7.1%	0.0%	7.1%	-6.0%

£18 reduction in burning cost in 2020

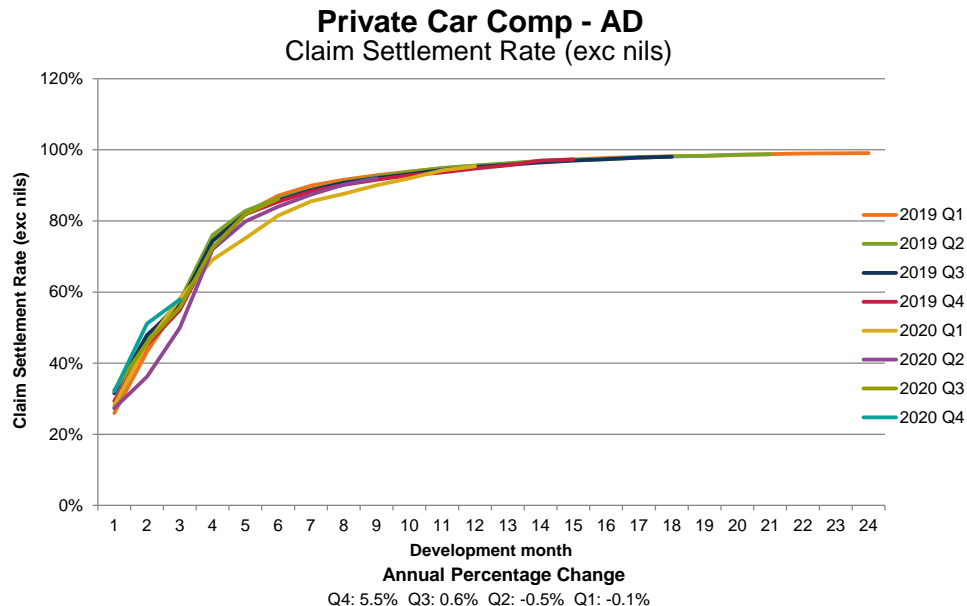
2020 severity inflation is consistent with long term trend.

- Note – development assumptions for projections do not include 2020 calendar period data. No other adjustments have been made for potential distortions / impact of COVID-19 on claims experience.



Industry Statistics - AD

Settlement Rate



2020 Q1 and 2020 Q2 do show a slower development pattern initially than 2019 but by the end of the year the settlement rate is consistent with older periods.





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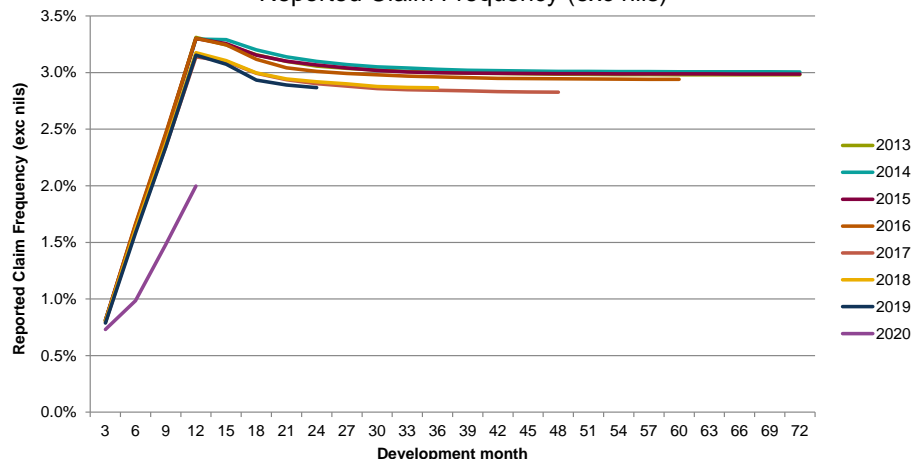
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Industry Statistics - TPPD Frequency

Private Car Comp - TPPD
Reported Claim Frequency (exc nils)



Annual Percentage Change

19-20: -36.7% 18-19: -1.8% 17-18: 0.7% 16-17: -4.1% 15-16: -1.6% 14-15: -0.6% 13-14: 0.9% 12-13: -4.7%

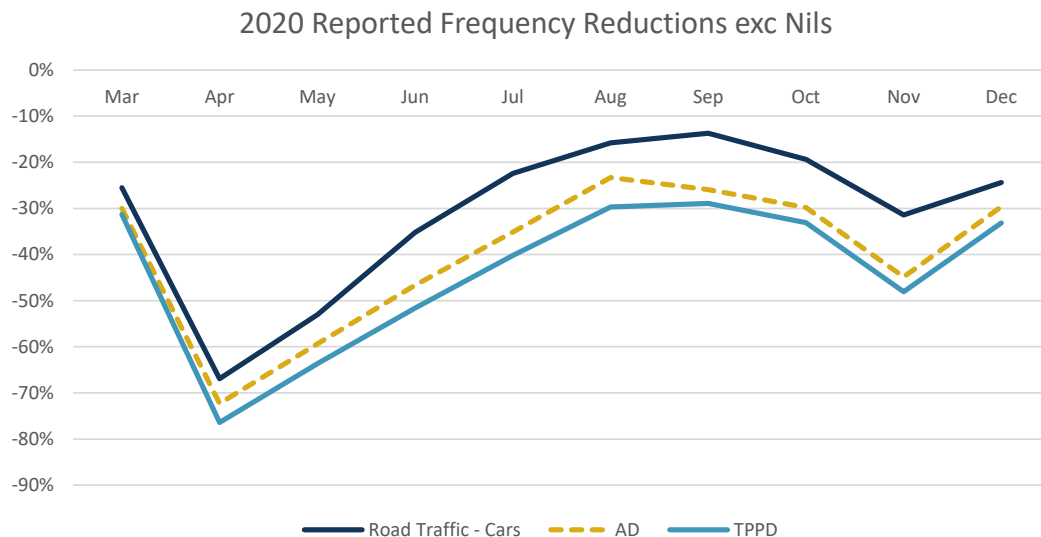
Frequency reduced by 36.7% in 2020.

Accident Quarter	Change in TPPD Frequency exc nils
2020 Q1	-12.0%
2020 Q2	-63.8%
2020 Q3	-32.4%
2020 Q4	-38.3%

As with AD, 2020 Q2 saw biggest reduction with frequency reducing by over 60%.



Industry Statistics - TPPD Frequency

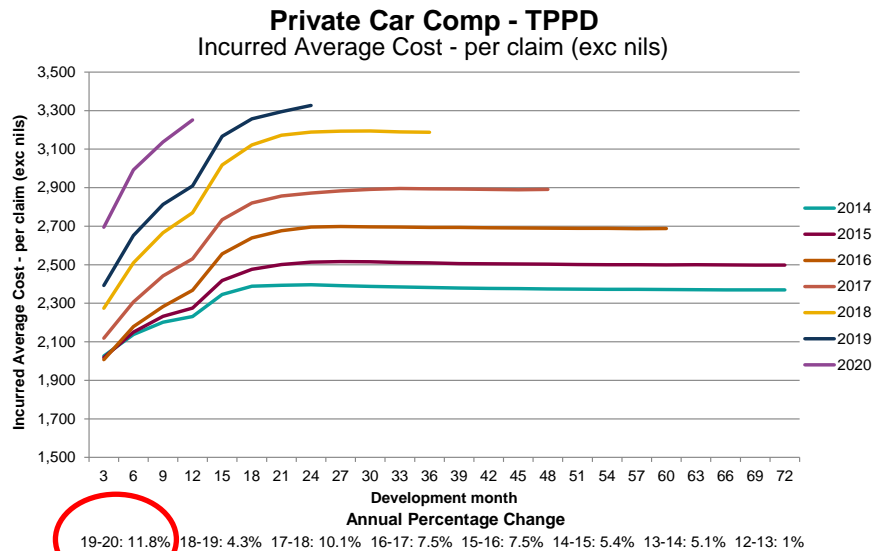


Accident Month	Change in Car Traffic	Change in TPPD Frequency exc nils
Mar	-25.5%	-31.3%
Apr	-66.9%	-76.4%
May	-53.0%	-63.6%
Jun	-35.2%	-51.6%
Jul	-22.4%	-40.2%
Aug	-15.8%	-29.7%
Sep	-13.7%	-28.9%
Oct	-19.4%	-33.1%
Nov	-31.4%	-48.1%
Dec	-24.4%	-33.1%

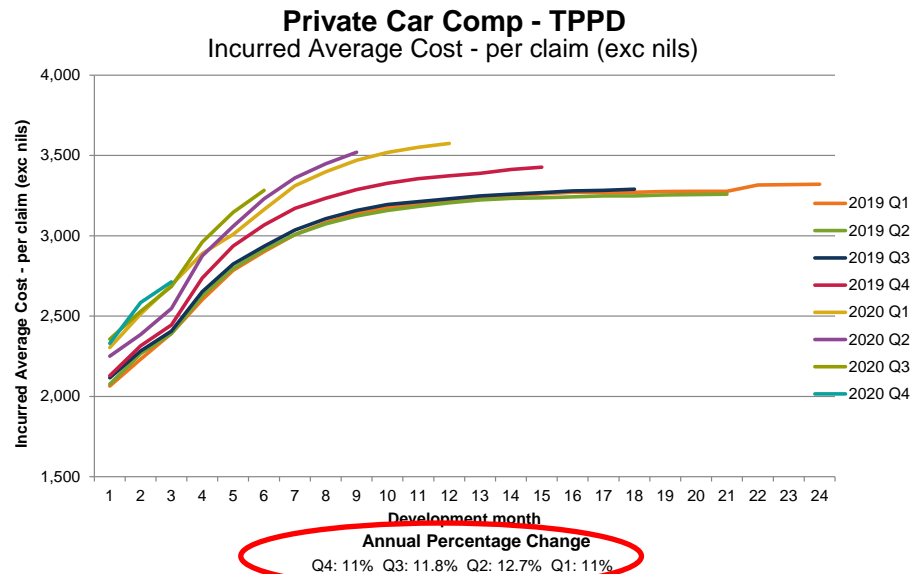
- Reduction in TPPD frequency larger than for AD and around 22% larger than the reduction in car traffic volumes.

Industry Statistics - TPPD

Severity



Severity inflation in 2020 of 11.8%



All accident quarters seeing similar levels of inflation



Institute and Faculty of Actuaries

Industry Statistics - TPPD

Projected TPPD Results

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)
2011	18.2	33,255	2,051	68.2	-14.3%	7.3%	-8.1%
2012	18.3	31,273	2,234	69.9	-6.0%	8.9%	2.4%
2013	18.2	29,792	2,256	67.2	-4.7%	1.0%	-3.8%
2014	18.5	30,048	2,370	71.2	0.9%	5.1%	6.0%
2015	19.3	29,859	2,498	74.6	-0.6%	5.4%	4.7%
2016	20.1	29,390	2,686	78.9	-1.6%	7.5%	5.8%
2017	20.6	28,225	2,886	81.4	-4.0%	7.4%	3.2%
2018	20.9	28,480	3,176	90.5	0.9%	10.1%	11.1%
2019	20.7	27,945	3,339	93.3	-1.9%	5.1%	3.2%
2020	20.2	17,864	3,729	66.6	-36.1%	11.7%	-28.6%
Average (2013 to 2020)					-7.0%	7.4%	-0.1%
Average (2015 to 2020)					-9.8%	8.3%	-2.2%
Average (2017 to 2020)					-14.1%	8.9%	-6.5%

TPPD burning cost reduced by £27 in 2020, back to levels seen in 2011 to 2013.

From 2016 to 2019 TPPD severity averaged 7.5%. In 2020 severity was materially higher than this at 11.7%.

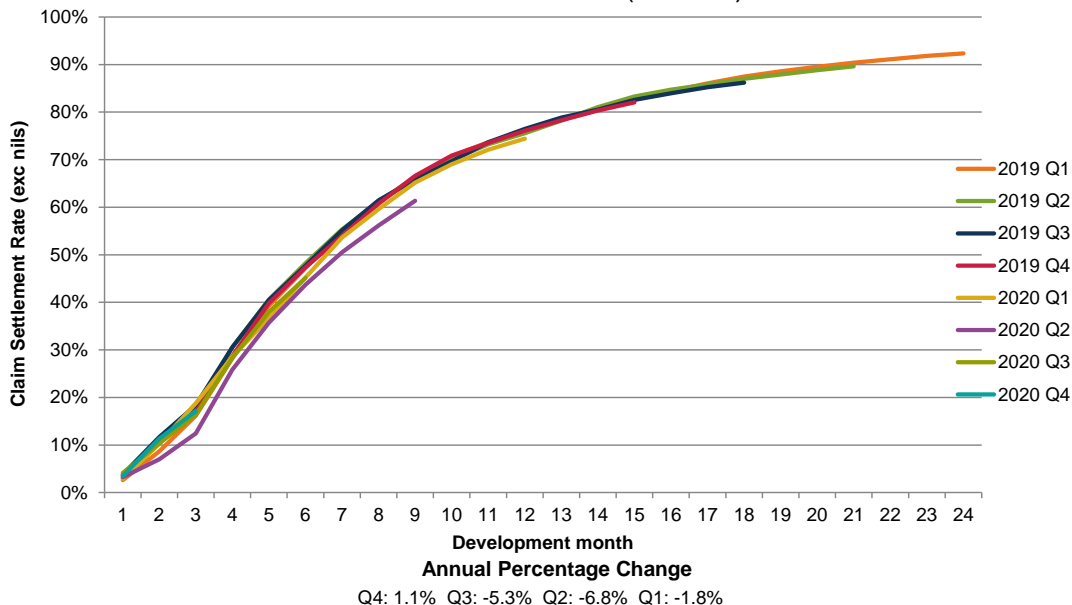
- Note – development assumptions for projections do not include 2020 calendar period data. No other adjustments have been made for potential distortions / impact of COVID-19 on claims experience.



Industry Statistics - TPPD

Settlement Rate

Private Car Comp - TPPD
Claim Settlement Rate (exc nils)

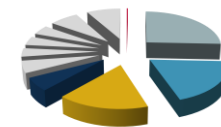


More persistent slowdown in settlement rates for TPPD than AD with rate still lower at end of the year than historically.

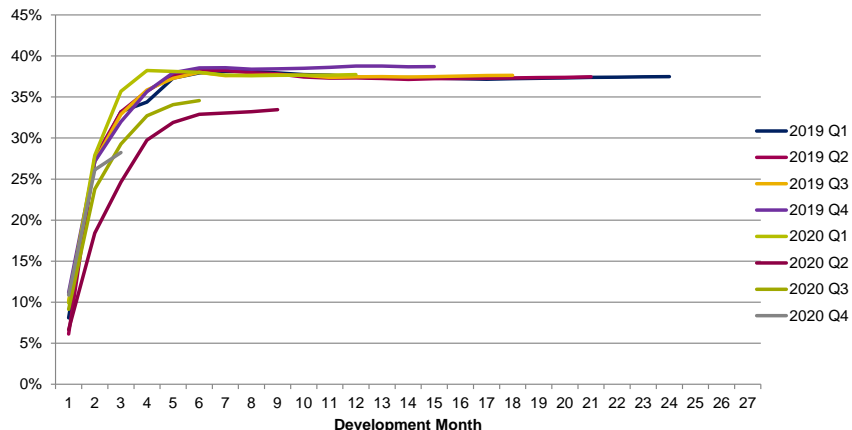


Industry Statistics - TPPD

Head of Damage

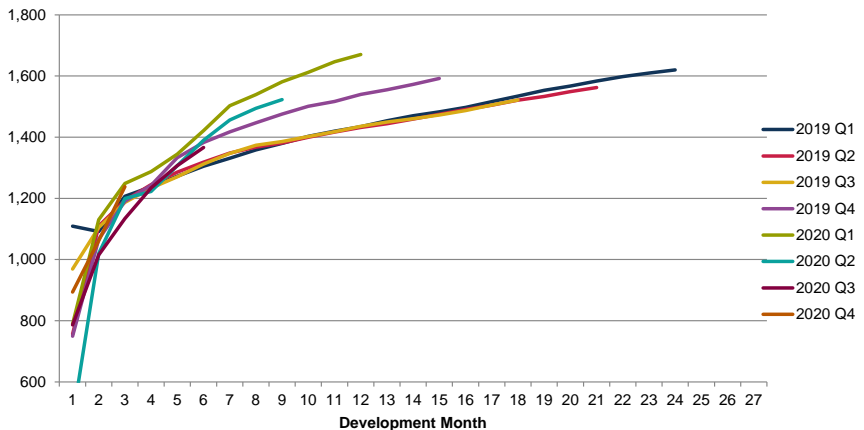


Proportion of Settled Claims with Credit Hire Element



Annual Percentage Change
 Q4: -11.7% Q3: -9% Q2: -11.5% Q1: 0.7% : :

Credit Hire Settled Average Cost per Credit Hire Claim



Annual Percentage Change
 Q4: 4% Q3: 4.1% Q2: 10.3% Q1: 16.5%

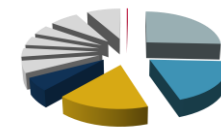
Proportion of claims settled with credit hire element is considerably lower in 2020 Q2 to Q4. Could be due to settlement delays or a lower credit hire propensity

Where there has been a credit hire claim, inflation is high from 2019 Q4 onwards, potentially as a result of increased hire duration.

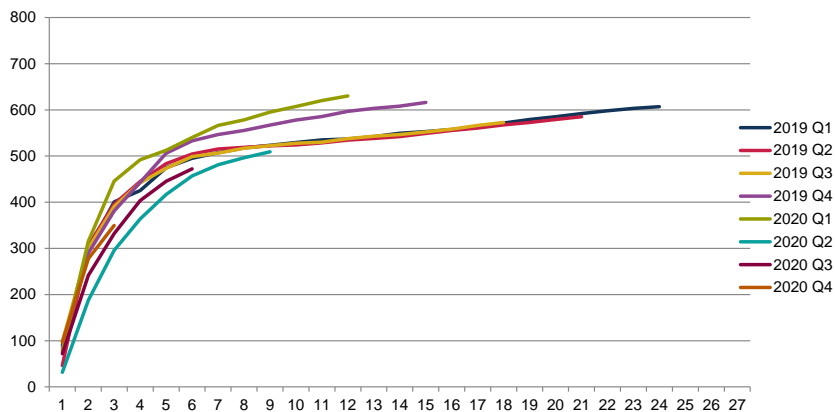


Industry Statistics - TPPD

Head of Damage



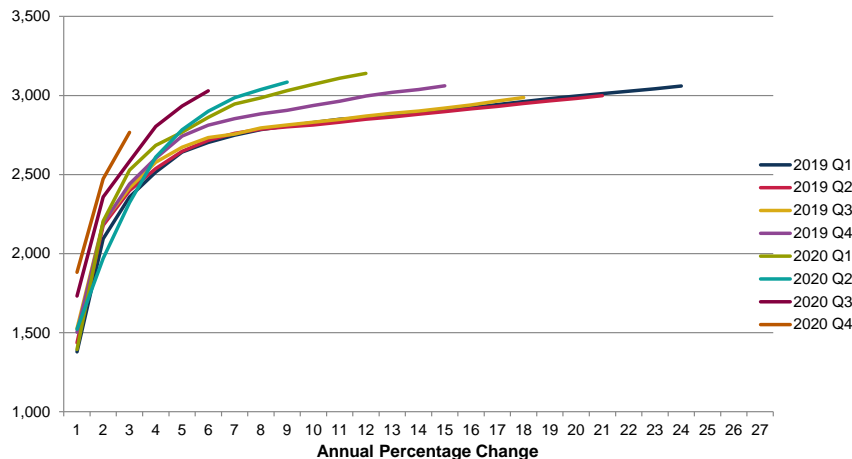
Credit Hire Settled Average Cost per TPPD Claim



Annual Percentage Change
 Q4: -8.2% Q3: -5.3% Q2: -2.5% Q1: 17.3%

Reduction in proportion outweighs inflation for 2020 Q2 to Q4. For 2020 as a whole settled credit hire inflation is 6.3%.

Non-Credit Hire Settled Average Cost per TPPD Claim



Annual Percentage Change
 Q4: 13.4% Q3: 10.8% Q2: 10.1% Q1: 9.8%

Non-credit hire inflation has been high in 2020 averaging 11.4%.





1. Market Environment

2. Industry Statistics

- AD
- TPPD
- Capped TPI
- Excess TPI
- Geographic

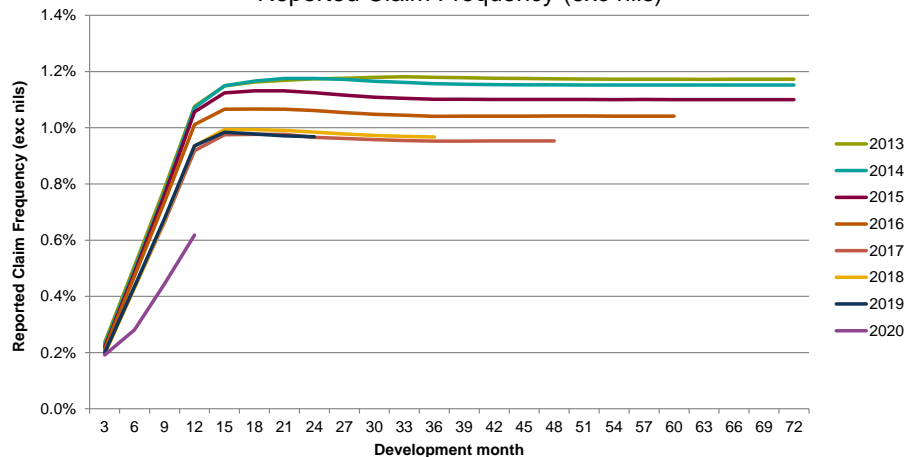
3. Conclusions

4. Appendix

Expertise
Sponsorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Supporting

Industry Statistics - Capped TPI Frequency

Private Car Comp - TPI Capped
Reported Claim Frequency (exc nils)



Annual Percentage Change

19-20: -33.9% 18-19: -1.7% 17-18: 1.5% 16-17: -8.5% 15-16: -5.4% 14-15: -4.5% 13-14: -1.8% 12-13: -

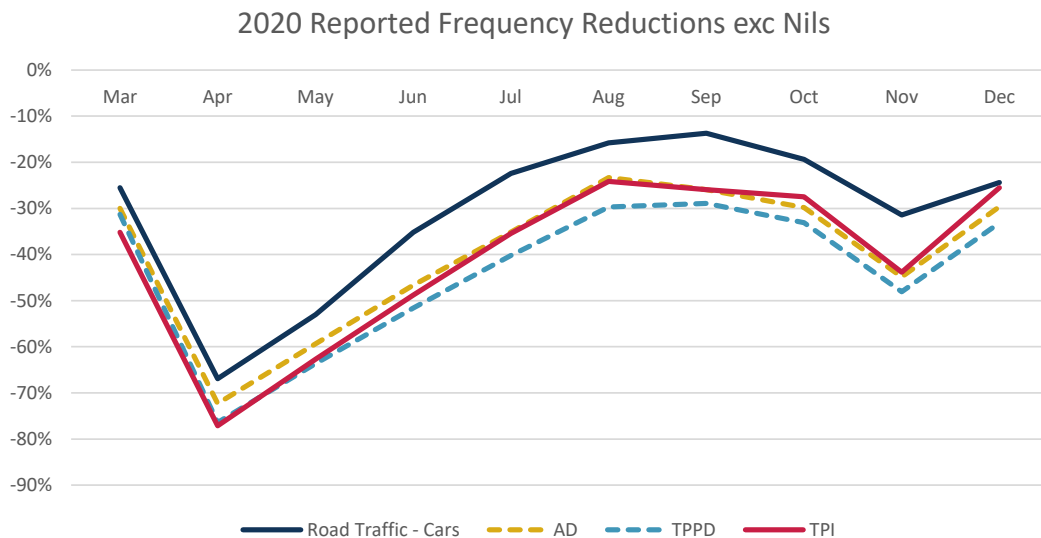
Frequency reduced by 33.9% in 2020.

Accident Quarter	Change in AD Frequency exc nils
2020 Q1	-12.4%
2020 Q2	-62.7%
2020 Q3	-28.2%
2020 Q4	-33.8%

As with AD and TPPD, 2020 Q2 saw biggest reduction with frequency reducing by over 60%.



Industry Statistics - Capped TPI Frequency



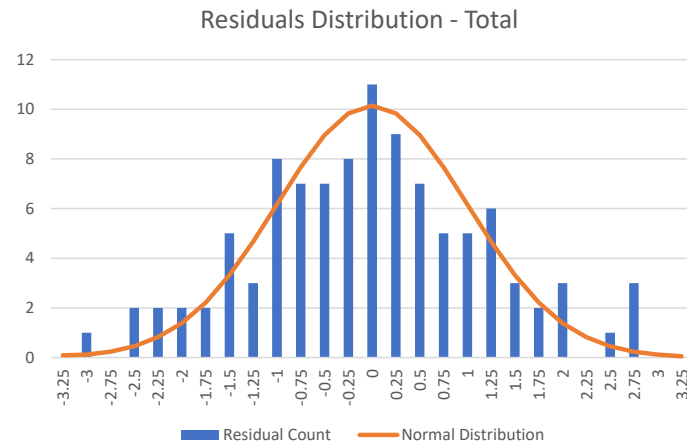
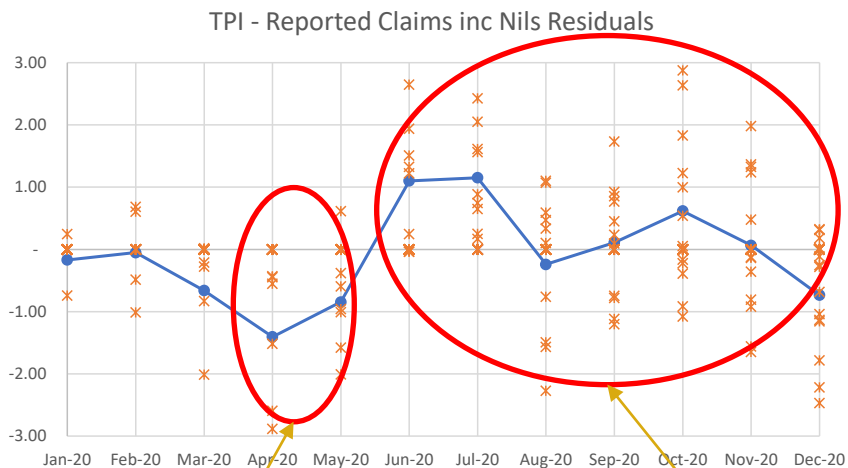
Accident Month	Change in Car Traffic	Change in Capped TPI Frequency exc nils
Mar	-25.5%	-35.2%
Apr	-66.9%	-77.1%
May	-53.0%	-62.7%
Jun	-35.2%	-48.8%
Jul	-22.4%	-35.4%
Aug	-15.8%	-24.2%
Sep	-13.7%	-26.0%
Oct	-19.4%	-27.5%
Nov	-31.4%	-43.9%
Dec	-24.4%	-25.5%

- Reduction in Capped TPI frequency around 18% larger than the reduction in car traffic volumes.
- Reductions for Capped TPI initially in line with TPPD but closer to AD for 2020 H2.



Industry Statistics - Capped TPI Reporting

- We have investigated reporting delays by considering link ratio residuals during calendar year 2020 vs the 2019 calendar year development pattern.



Significant slowdown in reporting in April and May

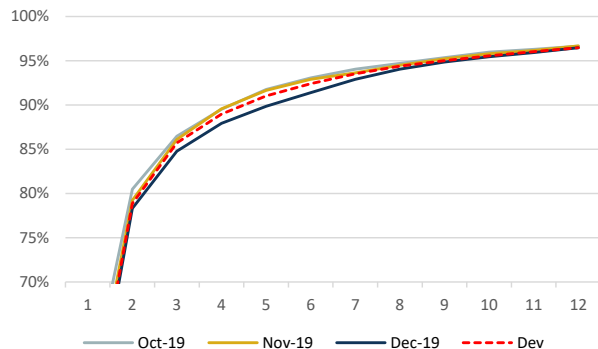
Catch-up in reporting in June and July with reporting patterns fairly normal then on.

Overall distribution of residuals supports reporting patterns back to normal

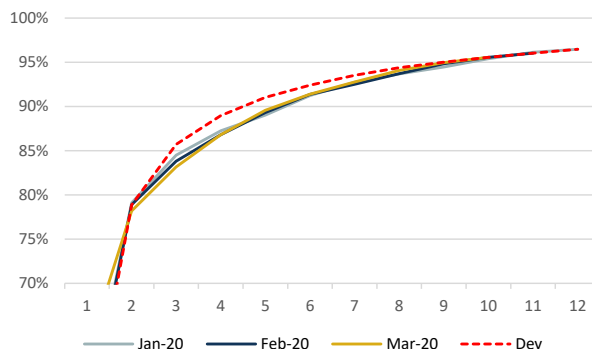


Industry Statistics - Capped TPI Reporting

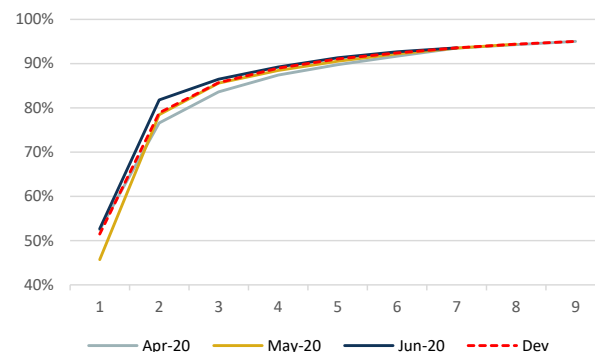
TPI Dev - 2019 Q4 Accident Periods



TPI Dev - 2020 Q1 Accident Periods



TPI Dev - 2020 Q2 Accident Periods



December 2019 shows significantly slower development patterns than historical trends.

All 2020 Q1 periods show slower reporting.

April shows consistently slower reporting but May only sees a lag for the first month. June more consistent with historical trend.

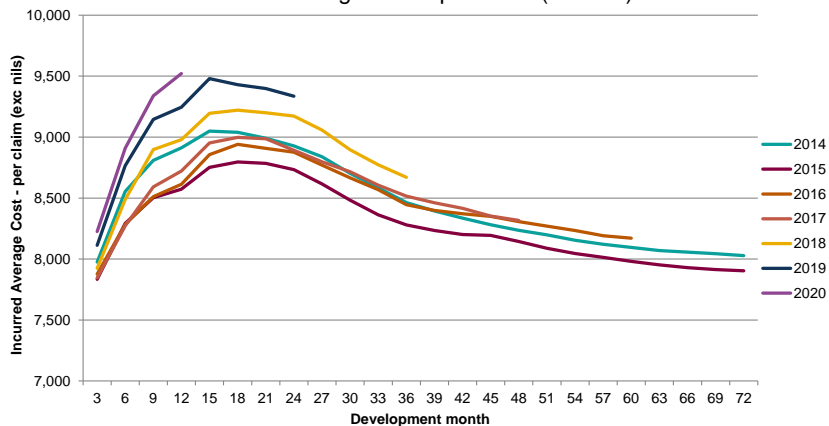
- Note – these graphs assume development from as at date of data (31 December 2020) is consistent with pre-COVID-19 data.



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Industry Statistics - Capped TPI Severity

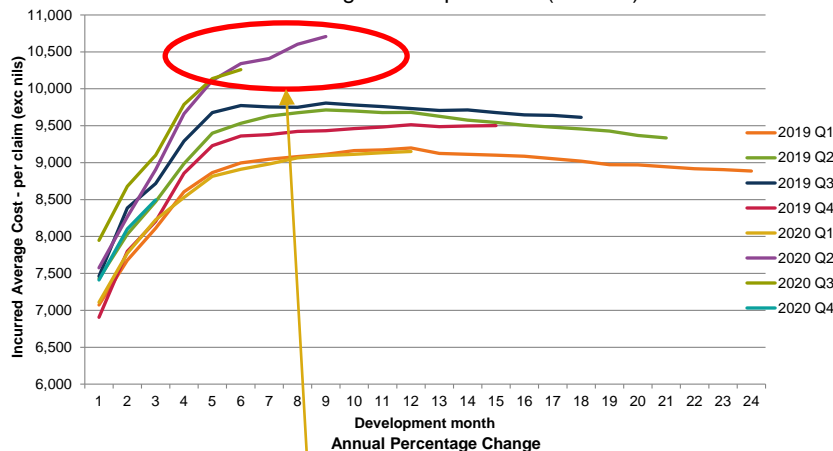
Private Car Comp - TPI Capped
Incurred Average Cost - per claim (exc nils)



19-20: 3% 18-19: 1.8% 17-18: 1.8% 16-17: 0.1% 15-16: 2.4% 14-15: -1.6% 13-14: -0.7% 12-13: -7.3%

Severity inflation in 2020 of 3%

Private Car Comp - TPI Capped
Incurred Average Cost - per claim (exc nils)



Q4: 3.5% Q3: 5% Q2: 10.2% Q1: -0.5%

2020 Q2 seeing higher inflation than other quarters plus a change in development profile with more adverse development in last two months

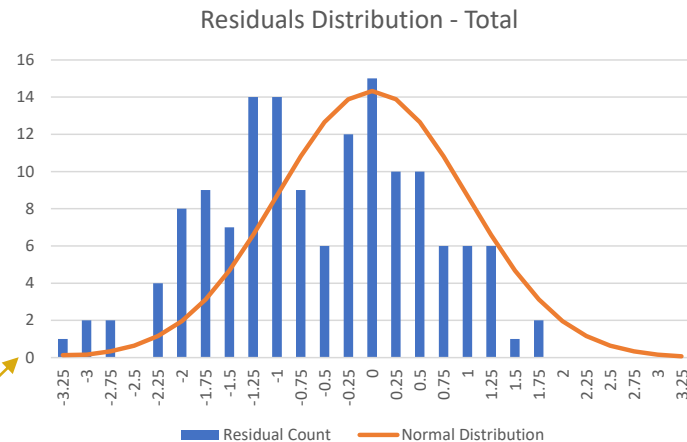
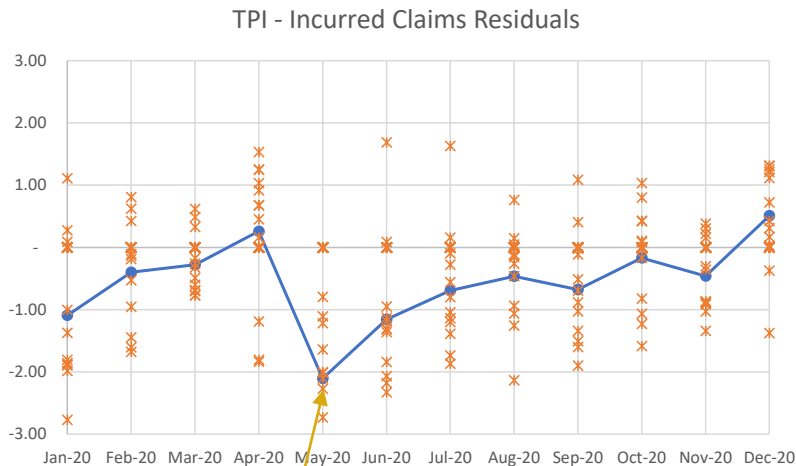


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Industry Statistics - Capped TPI

Incurred development

- We have investigated reporting delays by considering link ratio residuals during calendar year 2020 vs the 2019 calendar year development pattern.



Slowdown in May with potentially smaller slowdowns for the remainder of the year. No obvious catch-up

Negative skew on residual distribution.

This could be due to change in development or COVID-19 distortions.



Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

- As with previous iterations of the TPWP we have analysed Capped TPI in five bands. This year we have used the same capping definition as last year. 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 2020 accident year*)
 - £1k to £10k (*£11k in 2020 accident year*)
 - £10k to £20k (*£22k in 2020 accident year*)
 - £20k to £50k (*£55k in 2020 accident year*)
 - £50k to £100k (*£197k in 2020 accident year*)
- We have maintained the same band definitions as previously for Excess TPI.



Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

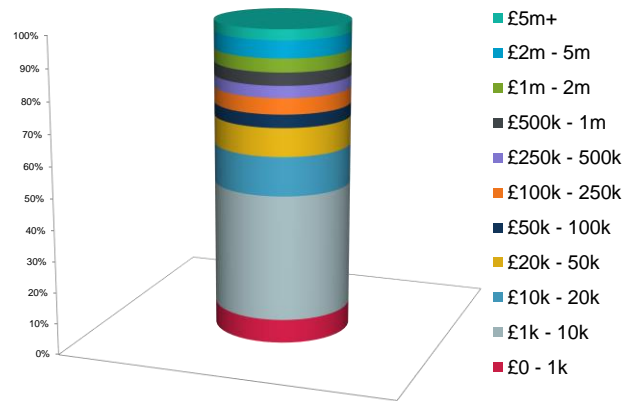
- When presenting results of a layered analysis, there is a choice in how to partition the claim amounts:
 - Type 1: In which claims that exhaust the width of a particular layer contribute an amount equal to the layer's width
 - Type 2: In which claims that exhaust the width of a particular layer are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



Industry Statistics - Capped TPI

Projected Capped TPI Results - Methodology

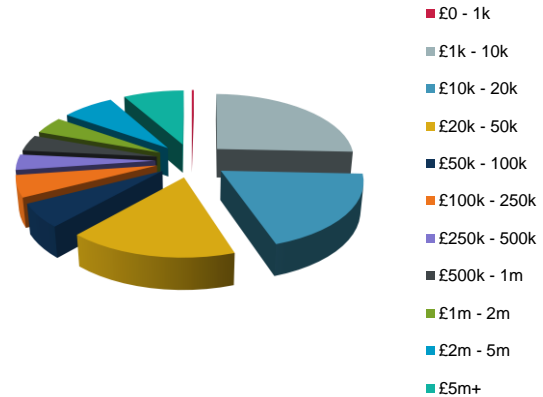
- Using the Type 1 definition, a claim of £15,000 from accident year 2010 contributes:
 - £1k to Layer 1 (0 – £1k)
 - £9k to Layer 2 (£1k – £10k)
 - £5k to Layer 3 (£10k – £20k)
 - £0 to all other layers
- The chart shows the projected total TPI burning cost split by layer using Type 1 definition.
- 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.



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.



Industry Statistics - Capped TPI

Projected Capped TPI Results

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)
2011	10.4	13,058	8,502	111.0	-14.5%	1.2%	-13.5%
2012	11.7	13,678	8,775	120.0	4.7%	3.2%	8.1%
2013	11.9	12,235	8,197	100.3	-10.6%	-6.6%	-16.5%
2014	12.6	12,062	8,106	97.8	-1.4%	-1.1%	-2.5%
2015	15.4	11,049	8,036	88.8	-8.4%	-0.9%	-9.2%
2016	18.1	10,261	8,250	84.6	-7.1%	2.7%	-4.7%
2017	18.8	9,373	8,224	77.1	-8.7%	-0.3%	-8.9%
2018	19.3	9,637	8,356	80.5	2.8%	1.6%	4.5%
2019	19.1	9,531	8,580	81.8	-1.1%	2.7%	1.6%
2020	18.8	6,353	9,137	58.1	-33.3%	6.5%	-29.0%
Average (2013 to 2020)					-8.9%	1.6%	-7.5%
Average (2015 to 2020)					-10.5%	2.6%	-8.1%
Average (2017 to 2020)					-12.2%	3.6%	-9.0%

£24 reduction in burning cost in 2020

2020 severity inflation high at 6.5%.

- Note – development assumptions for projections do not include 2020 calendar period data. No other adjustments have been made for potential distortions / impact of COVID-19 on claims experience.



Industry Statistics - Capped TPI

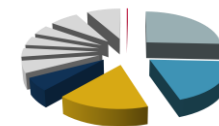
Projected Capped TPI Results

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)
2018 Q1	4.7	9,681	8,049	77.9	0.6%	1.2%	1.9%
2018 Q2	4.8	9,334	8,482	79.2	4.8%	3.9%	8.9%
2018 Q3	4.9	9,271	8,624	80.0	3.7%	0.8%	4.5%
2018 Q4	4.9	10,260	8,283	85.0	2.4%	0.7%	3.1%
2019 Q1	4.8	9,560	8,292	79.3	-1.2%	3.0%	1.7%
2019 Q2	4.8	9,111	8,552	77.9	-2.4%	0.8%	-1.6%
2019 Q3	4.8	9,124	8,853	80.8	-1.6%	2.7%	1.0%
2019 Q4	4.8	10,337	8,627	89.2	0.7%	4.2%	4.9%
2020 Q1	4.7	8,430	8,336	70.3	-11.8%	0.5%	-11.4%
2020 Q2	4.6	3,392	9,894	33.6	-62.8%	15.7%	-56.9%
2020 Q3	4.7	6,591	9,919	65.4	-27.8%	12.0%	-19.1%
2020 Q4	4.8	6,956	8,999	62.6	-32.7%	4.3%	-29.8%

2020 Q2 and Q3 are driving high inflation in 2020





Industry Statistics - Capped TPI

Projected Capped TPI Results

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

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k	< 100k
Frequency exc Nils (claims per million policy years)						
2011	1,559	8,426	2,078	797	127	12,986
2012	1,709	8,655	2,206	895	140	13,605
2013	1,404	8,274	1,754	623	110	12,166
2014	1,377	8,269	1,711	529	108	11,995
2015	1,170	7,831	1,460	429	98	10,988
2016	1,128	7,268	1,325	379	101	10,200
2017	1,147	6,591	1,154	336	90	9,318
2018	1,265	6,726	1,149	336	101	9,577
2019	1,201	6,693	1,129	345	105	9,474
2020	772	4,465	764	227	78	6,306

Layers 1 to 4 have seen a similar reduction in frequency in 2020.

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

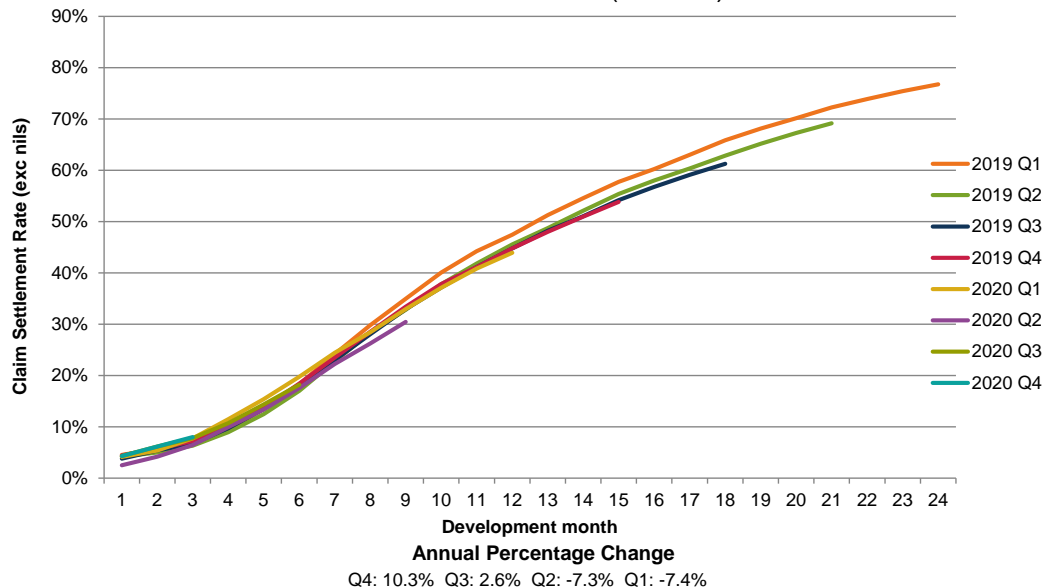
Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k
Change in Frequency exc Nils					
2011	-7.0%	-15.8%	-14.9%	-15.4%	-2.7%
2012	9.6%	2.7%	6.2%	12.3%	10.9%
2013	-17.8%	-4.4%	-20.5%	-30.4%	-21.4%
2014	-1.9%	-0.1%	-2.4%	-15.0%	-2.3%
2015	-15.0%	-5.3%	-14.7%	-18.9%	-8.7%
2016	-3.6%	-7.2%	-9.2%	-11.8%	2.5%
2017	1.7%	-9.3%	-13.0%	-11.2%	-10.8%
2018	10.3%	2.1%	-0.4%	0.1%	12.2%
2019	-5.0%	-0.5%	-1.7%	2.7%	3.7%
2020	-35.8%	-33.3%	-32.3%	-34.2%	-25.2%

Claims between £50k and £100k have seen a smaller reduction in frequency than smaller value claims.



Industry Statistics – Capped TPI Settlement Rate

Private Car Comp - TPI Capped
Claim Settlement Rate (exc nils)



Clear slowdown in settlement rates during 2020



1. Market Environment

2. Industry Statistics

- AD
- TPPD
- Capped TPI
- Excess TPI
- Geographic

3. Conclusions

4. Appendix

Expertise
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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 (*£492k in 2020 accident year*)
 - £250k to £500k (*£984k in 2020 accident year*)
 - £500k to £1m (*£2.0m in 2020 accident year*)
 - £1m to £2m (*£3.9m in 2020 accident year*)
 - £2m to £5m (*£9.8m in 2020 accident year*)
 - >£5m
- Projections undertaken by layer with companies grouped into three 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 up to Feb 2017. All data after this point is excluded from the assumed development (i.e. it is assumed that the development profile by layer pre Ogden still applies). This development profile is applied to the latest incurred position.
- However, in some cases where development post Feb 2017 is materially different from before the more recent experience has been factored in. In these instances, the 2020 calendar year experience has been excluded.
- 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.



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	Ultimate Excess TPI Claim Severity	Ultimate Excess TPI Burning Cost	Year-on-Year Change in Frequency	Year-on-Year Change in Severity	Year-on-Year Change in Burning Cost
		(Non-nil claims per million vehicle years)	(£)	(£)	(% pa)	(% pa)	(% pa)
2011	10.4	72	488,029	35.1	-16.9%	16.5%	-3.2%
2012	11.7	74	536,903	39.7	2.8%	10.0%	13.1%
2013	11.9	69	661,036	45.6	-6.5%	23.1%	15.1%
2014	12.6	67	756,835	51.0	-2.3%	14.5%	11.8%
2015	15.4	61	802,100	48.8	-9.7%	6.0%	-4.3%
2016	18.1	61	934,125	56.8	-0.1%	16.5%	16.4%
2017	18.8	56	907,995	50.5	-8.5%	-2.6%	-11.1%
2018	19.3	59	867,934	51.6	6.8%	-4.4%	2.1%
2019	19.1	58	966,237	55.6	-3.4%	11.3%	7.9%
2020	18.8	47	1,073,592	50.3	-18.7%	11.1%	-9.6%
Average (2013 to 2020)					-5.4%	7.2%	1.4%
Average (2015 to 2020)					-5.1%	6.0%	0.6%
Average (2017 to 2020)					-5.6%	5.7%	-0.2%

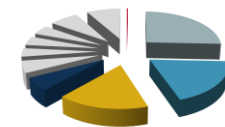
18% reduction in TPI Excess frequency in 2020 vs a 33% reduction for TPI Capped.

Year-on-year severity is volatile but the averages are in the range 5% to 11% p.a. Some of this will be due to the change in Ogden rate.

- Treatment of PPOs within our data varies by data contributor but in general they are included within the data either at an equivalent lump sum value based on the Ogden rate prevailing at the time or at a discount rate used by the company to value the PPO.
- The uncertainty in projections of these claims is exacerbated by the changes in the Ogden discount rate and COVID-19 and their impact on development trends, claims costs and settlement speeds.



Institute and Faculty of Actuaries



Industry Statistics – Excess TPI

Projected Excess TPI Results

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)						
2011	43.9	13.5	7.0	4.0	1.9	1.5
2012	44.8	14.0	6.6	4.4	2.8	1.3
2013	42.3	13.3	6.0	3.4	2.1	2.0
2014	39.9	13.2	5.7	4.0	2.9	1.8
2015	35.2	12.8	5.4	2.9	3.1	1.4
2016	34.3	13.9	4.4	3.6	3.1	1.6
2017	30.7	12.1	5.3	3.4	3.0	1.3
2018	36.1	11.9	4.8	2.7	2.6	1.3
2019	33.9	12.0	4.3	3.2	2.7	1.5
2020	28.1	9.1	3.7	2.6	2.2	1.2

No clear trend in change in frequency by layer in 2020.

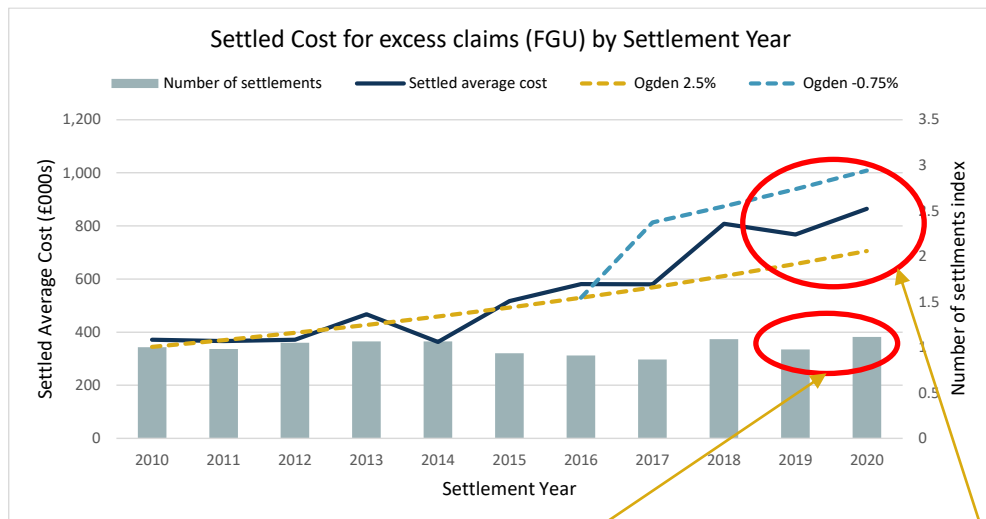
Private Car Comprehensive Excess TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 7% pa)

Accident Year	£100k - 250k	£250k - 500k	£500k - 1m	£1m - 2m	£2m to 5m	> £5m
Change in Frequency exc Nils (finishing in layer)						
2011	-18.5%	-24.0%	-3.9%	24.4%	-21.5%	-17.9%
2012	1.9%	3.4%	-5.0%	10.5%	46.6%	-16.7%
2013	-5.6%	-5.2%	-9.8%	-21.4%	-25.9%	56.5%
2014	-5.7%	-0.3%	-4.6%	15.6%	40.3%	-13.1%
2015	-11.7%	-3.3%	-4.5%	-26.1%	5.7%	-18.5%
2016	-2.6%	8.6%	-18.2%	23.7%	-1.6%	9.6%
2017	-10.5%	-13.1%	19.7%	-7.2%	-3.0%	-19.2%
2018	17.8%	-1.7%	-9.9%	-19.2%	-13.5%	6.4%
2019	-6.2%	1.2%	10.4%	10.5%	4.2%	11.7%
2020	-17.1%	-24.6%	-14.8%	-19.8%	-16.9%	-18.4%



2020 - 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 7.5%.
- 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.

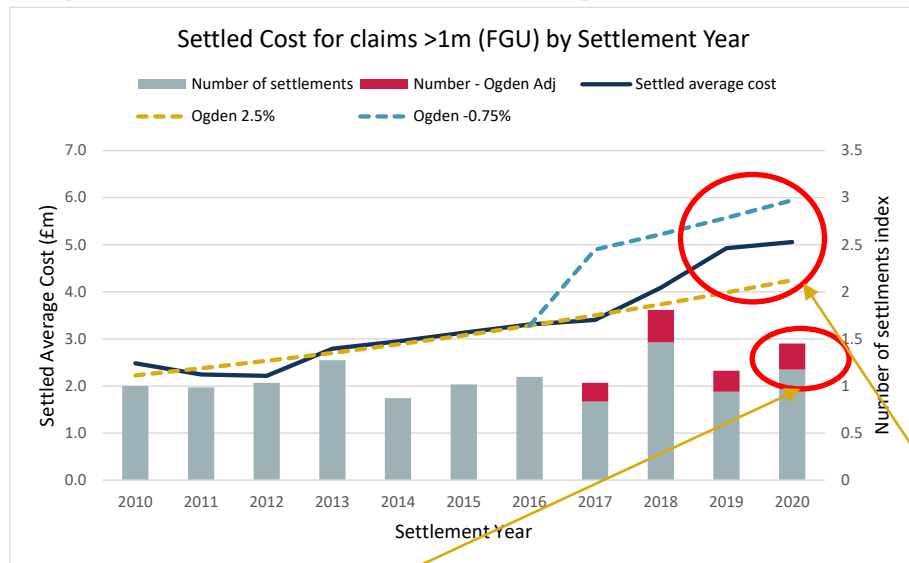
Number of settlements in 2020 15% higher than 2019 and one of the highest since 2010.

Actual settled severity in 2020 was 12.5% higher than in 2019 and is approximately halfway between the hypothetical 2.5% and -0.75% values.



2020 - 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 2020 increased as for all excess claims but level of settlements still below 2018.

Actual settled severity in 2020 is 2.5% higher than in 2019. Claims in 2019 and 2020 settled for 21% more than the 2.5% estimate.



1. Market Environment

2. Industry Statistics

- AD
- TPPD
- Capped TPI
- Excess TPI
- Geographic

3. Conclusions

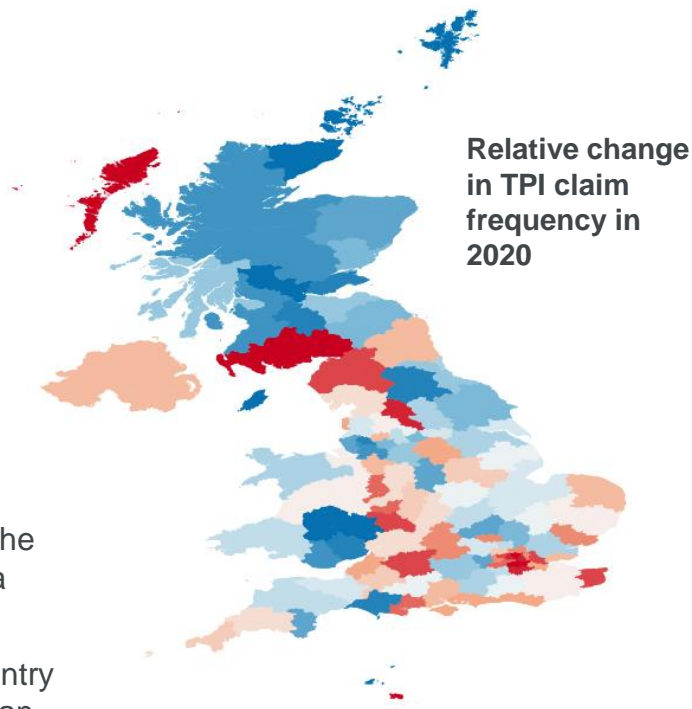
4. Appendix

Expertise
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Progress
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Sessional Meetings
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Working parties
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Shaping the future
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Industry Statistics – Geographic

Difference to UK Total change in claim frequency in 2020

Region	AD Freq	TPD Freq	TPI Freq
North-west	-1.5%	-0.6%	-2.5%
North-east	1.7%	2.0%	0.0%
South-east	-0.8%	-1.3%	2.1%
London	2.9%	6.7%	12.3%
Midlands	-0.2%	-0.4%	-0.2%
Wales	1.8%	1.2%	-6.5%
East	-1.8%	-2.6%	-0.2%
West	1.8%	1.7%	1.7%
Scotland	-1.2%	-2.1%	-6.3%



- This table shows the change in 2020 frequency by region relative to the overall UK average change in frequency. For example, London saw a 2.9% lower reduction in AD frequency in 2020 than for the whole UK.
- London has seen less of a reduction in claim frequency, than the country as a whole. TPI frequency reduction in London was materially less than for the rest of the country.
- Scotland has seen a bigger reduction in claim frequency than average.





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Conclusions

Accident Year	Burning Cost (£)				
	AD	TPD	Capped TPI	Excess TPI*	Total AD + TP
2011	50	68	111	35	264
2012	50	70	120	40	280
2013	49	67	100	46	262
2014	51	71	98	51	271
2015	56	75	89	49	268
2016	59	79	85	57	279
2017	60	81	77	51	269
2018	68	90	81	52	291
2019	68	93	82	56	299
2020	50	67	58	50	225

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

- AD, TPPD and TPI frequency all down by over 30% in 2020.
- Change in claims reporting profile in the first lockdown in 2020 but looks back to normal by end of year
- TPPD severity inflation high at 11.7% in 2020, likely to be due to COVID-19.
- Possible COVID-19 related slowdown in small injury incurred development.
- Claims over £50k seeing a lower reduction in frequency in 2020 than attritional claims potentially due to increase in cycling.
- The burning cost in 2020 is estimated to decrease by 25% or £74 per policy.



Conclusions

- Outlook for 2021 and beyond
 - 2021 still materially impacted by lockdowns and reduction in vehicle use.
 - However, even as overall levels of vehicle use has returned close to pre-pandemic levels it not clear whether some of the changes resulting from COVID-19 will persist into the future. We have seen:
 - A reduction in proportion of accidents occurring in the morning rush hour;
 - A larger reduction in motorway mileage than other road type;
 - Increased cyclist mileage;
 - Increasing age of vehicle park as new registrations have reduced; and
 - Reduction in proportion of young people holding licences.
 - There remains further uncertainty from the introduction of the Whiplash Reforms in May 2021, the impact of the FCA dual pricing review and Brexit and related / other supply chain issues.



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Industry Statistics - AD

Projected AD Results

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)
2018 Q1	5.1	47,196	2,670	42.1%	1,547	73.0	3.8%	13.8%	-1.7%	15.2%	19.6%
2018 Q2	5.1	43,872	2,597	43.6%	1,466	64.3	1.8%	11.4%	-3.1%	14.2%	16.2%
2018 Q3	5.2	43,295	2,612	44.2%	1,457	63.1	2.0%	7.7%	-3.7%	11.1%	13.3%
2018 Q4	5.2	46,604	2,755	43.0%	1,570	73.2	-2.1%	7.2%	-1.0%	8.1%	5.8%
2019 Q1	5.1	43,656	2,882	46.8%	1,534	67.0	-7.5%	7.9%	11.2%	-0.8%	-8.3%
2019 Q2	5.1	41,305	2,709	44.4%	1,505	62.2	-5.9%	4.3%	2.0%	2.7%	-3.3%
2019 Q3	5.1	42,397	2,734	44.7%	1,512	64.1	-2.1%	4.7%	1.1%	3.8%	1.6%
2019 Q4	5.1	47,418	2,888	43.0%	1,645	78.0	1.7%	4.8%	0.1%	4.8%	6.6%
2020 Q1	5.0	39,433	2,997	43.7%	1,687	66.5	-9.7%	4.0%	-6.6%	10.0%	-0.7%
2020 Q2	5.0	18,802	2,795	42.9%	1,596	30.0	-54.5%	3.2%	-3.4%	6.0%	-51.8%
2020 Q3	5.0	30,816	2,978	45.5%	1,623	50.0	-27.3%	8.9%	1.8%	7.3%	-22.0%
2020 Q4	5.1	31,355	3,055	44.2%	1,704	53.4	-33.9%	5.8%	2.8%	3.6%	-31.5%



Industry Statistics - TPPD

Projected TPPD Results

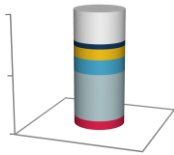
Projected Ultimate TPPD Results for Private Car Comprehensive

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)
2018 Q1	5.2	28,636	3,111	89.1	2.3%	11.6%	14.2%
2018 Q2	5.2	27,985	3,136	87.7	1.1%	11.2%	12.4%
2018 Q3	5.3	27,548	3,164	87.2	1.3%	9.7%	11.1%
2018 Q4	5.3	29,755	3,287	97.8	-0.8%	8.3%	7.4%
2019 Q1	5.2	27,371	3,314	90.7	-4.4%	6.5%	1.8%
2019 Q2	5.2	27,177	3,258	88.5	-2.9%	3.9%	0.9%
2019 Q3	5.2	27,346	3,305	90.4	-0.7%	4.4%	3.7%
2019 Q4	5.1	29,899	3,469	103.7	0.5%	5.6%	6.1%
2020 Q1	5.1	24,089	3,667	88.3	-12.0%	10.7%	-2.6%
2020 Q2	5.0	9,828	3,721	36.6	-63.8%	14.2%	-58.7%
2020 Q3	5.1	18,541	3,743	69.4	-32.2%	13.3%	-23.2%
2020 Q4	5.1	18,887	3,797	71.7	-36.8%	9.5%	-30.9%



Appendix – TPI Capped

Type 1 KPIs



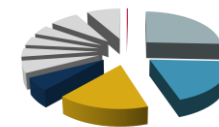
Private Car Comprehensive TPI Capped Results in Layer (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k - £100k	<100k
Frequency exc Nils (in layer and above) (claims per million vehicle years)						
2010	15,279	13,604	3,599	1,158	217	15,279
2011	13,058	11,499	3,073	995	199	13,058
2012	13,678	11,970	3,315	1,109	214	13,678
2013	12,235	10,830	2,556	802	179	12,235
2014	12,062	10,685	2,415	704	175	12,062
2015	11,049	9,879	2,048	588	159	11,049
2016	10,261	9,133	1,866	540	162	10,261
2017	9,373	8,226	1,635	482	146	9,373
2018	9,637	8,372	1,645	497	160	9,637
2019	9,531	8,330	1,637	508	162	9,531
2020	6,353	5,581	1,117	352	125	6,353
Average Cost (£)						
2010	927	5,309	5,770	12,576	30,877	8,404
2011	933	5,343	5,819	13,068	32,774	8,502
2012	941	5,443	5,956	13,152	35,844	8,775
2013	956	5,077	5,855	13,732	42,455	8,197
2014	963	5,054	5,696	14,275	47,616	8,106
2015	980	4,983	5,688	15,067	51,632	8,036
2016	985	5,046	5,750	15,941	56,334	8,250
2017	978	5,036	5,842	16,197	62,725	8,224
2018	977	5,060	5,937	16,705	66,558	8,356
2019	997	5,069	6,054	16,680	71,911	8,580
2020	1,013	5,138	6,079	17,575	79,563	9,137
Burning Cost (£)						
2010	14.2	72.2	20.8	14.6	6.7	128.4
2011	12.2	61.4	17.9	13.0	6.5	111.0
2012	12.9	65.1	19.7	14.6	7.7	120.0
2013	11.7	55.0	15.0	11.0	7.6	100.3
2014	11.6	54.0	13.8	10.1	8.3	97.8
2015	10.8	49.2	11.6	8.9	8.2	88.8
2016	10.1	46.1	10.7	8.6	9.1	84.6
2017	9.2	41.4	9.6	7.8	9.1	77.1
2018	9.4	42.4	9.8	8.3	10.7	80.5
2019	9.5	42.2	9.9	8.5	11.7	81.8
2020	6.4	28.7	6.8	6.2	10.0	58.1



Appendix – TPI Capped

Type 2 KPIs



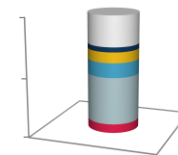
Private Car Comprehensive Capped TPI Type 2 Layered Results (all layers given in 2010 money, indexed at 1% pa)

Accident Year	£0 - 1k	£1k - 10k	£10k - 20k	£20k - 50k	£50k to £100k	< 100k
Frequency exc Nils (claims per million policy years)						
2011	1,559	8,426	2,078	797	127	12,986
2012	1,709	8,655	2,206	895	140	13,605
2013	1,404	8,274	1,754	623	110	12,166
2014	1,377	8,269	1,711	529	108	11,995
2015	1,170	7,831	1,460	429	98	10,988
2016	1,128	7,268	1,325	379	101	10,200
2017	1,147	6,591	1,154	336	90	9,318
2018	1,265	6,726	1,149	336	101	9,577
2019	1,201	6,693	1,129	345	105	9,474
2020	772	4,465	764	227	78	6,306
Average Cost (£)						
2011	367	4,986	13,868	28,975	69,815	7,957
2012	384	5,031	14,022	29,376	72,310	8,201
2013	385	4,812	14,124	29,390	76,114	7,548
2014	365	4,835	14,164	29,476	79,975	7,415
2015	379	4,863	14,254	29,976	81,874	7,303
2016	366	4,951	14,383	30,377	84,889	7,404
2017	303	4,963	14,527	30,716	88,986	7,314
2018	280	4,997	14,651	30,836	90,636	7,342
2019	328	4,996	14,795	30,971	95,131	7,515
2020	349	5,041	14,836	31,087	97,800	7,745
Burning Cost (£)						
2010	0.6	49.8	33.6	26.9	8.9	119.8
2011	0.6	42.0	28.8	23.1	8.8	103.3
2012	0.7	43.5	30.9	26.3	10.2	111.6
2013	0.5	39.8	24.8	18.3	8.4	91.8
2014	0.5	40.0	24.2	15.6	8.6	88.9
2015	0.4	38.1	20.8	12.9	8.1	80.3
2016	0.4	36.0	19.1	11.5	8.6	75.5
2017	0.3	32.7	16.8	10.3	8.0	68.1
2018	0.4	33.6	16.8	10.4	9.2	70.3
2019	0.4	33.4	16.7	10.7	10.0	71.2
2020	0.3	22.5	11.3	7.1	7.7	48.8



Appendix – TPI Excess

Type 1 KPIs



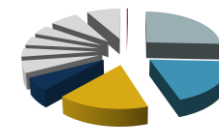
Private Car Comprehensive TPI Capped Results in Layer (all layers given in 2010 money, indexed at 7% pa)

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)							
2010	86.5	32.6	14.8	7.5	4.3	1.9	86.5
2011	71.9	27.9	14.4	7.4	3.5	1.5	71.9
2012	73.9	29.1	15.1	8.5	4.1	1.3	73.9
2013	69.0	26.8	13.5	7.6	4.1	2.0	69.0
2014	67.4	27.6	14.4	8.7	4.7	1.8	67.4
2015	60.9	25.7	12.9	7.5	4.5	1.4	60.9
2016	60.8	26.6	12.7	8.3	4.6	1.6	60.8
2017	55.6	25.0	12.9	7.6	4.2	1.3	55.6
2018	59.4	23.3	11.4	6.6	3.9	1.3	59.4
2019	57.6	23.7	11.7	7.4	4.2	1.5	57.6
2020	46.8	18.7	9.7	6.0	3.5	1.2	46.8
Average Cost (£000s)							
2010	91	164	351	771	1,833	2,162	419
2011	95	186	359	706	2,198	3,215	488
2012	103	195	405	774	2,009	4,183	537
2013	112	207	448	882	2,471	4,732	661
2014	125	230	484	936	2,505	5,371	757
2015	133	243	518	1,063	2,435	6,182	802
2016	141	251	598	1,107	2,785	7,663	934
2017	156	283	590	1,139	2,552	6,081	908
2018	155	298	636	1,296	2,745	6,553	868
2019	171	312	717	1,338	3,168	4,560	966
2020	186	347	763	1,399	3,549	5,680	1,074
Burning Cost (£)							
2010	7.9	5.3	5.2	5.8	8.0	4.1	36.2
2011	6.8	5.2	5.2	5.3	7.6	5.0	35.1
2012	7.6	5.7	6.1	6.6	8.3	5.4	39.7
2013	7.7	5.5	6.1	6.7	10.2	9.5	45.6
2014	8.5	6.3	7.0	8.1	11.8	9.4	51.0
2015	8.1	6.3	6.7	7.9	11.1	8.8	48.8
2016	8.6	6.7	7.6	9.1	12.9	12.0	56.8
2017	8.7	7.1	7.6	8.7	10.8	7.7	50.5
2018	9.2	6.9	7.3	8.6	10.7	8.8	51.6
2019	9.9	7.4	8.4	9.9	13.2	6.8	55.6
2020	8.7	6.5	7.4	8.4	12.2	7.0	50.3



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)						
2011	43.9	13.5	7.0	4.0	1.9	1.5
2012	44.8	14.0	6.6	4.4	2.8	1.3
2013	42.3	13.3	6.0	3.4	2.1	2.0
2014	39.9	13.2	5.7	4.0	2.9	1.8
2015	35.2	12.8	5.4	2.9	3.1	1.4
2016	34.3	13.9	4.4	3.6	3.1	1.6
2017	30.7	12.1	5.3	3.4	3.0	1.3
2018	36.1	11.9	4.8	2.7	2.6	1.3
2019	33.9	12.0	4.3	3.2	2.7	1.5
2020	28.1	9.1	3.7	2.6	2.2	1.2
Average Cost (£000s)						
2011	161	366	706	1,457	3,529	8,565
2012	173	382	763	1,569	3,651	9,908
2013	188	412	852	1,696	3,764	10,857
2014	207	452	878	1,805	4,277	11,925
2015	216	486	967	1,941	4,428	13,194
2016	225	513	1,064	2,107	4,911	15,167
2017	248	557	1,088	2,160	4,800	14,110
2018	261	600	1,185	2,407	4,922	15,144
2019	282	627	1,287	2,528	5,530	13,753
2020	310	684	1,383	2,608	6,191	15,515
Burning Cost (£)						
2011	7.1	5.0	4.9	5.8	6.8	13.2
2012	7.8	5.3	5.0	6.9	10.3	12.8
2013	8.0	5.5	5.1	5.8	7.9	21.9
2014	8.3	6.0	5.0	7.2	12.6	20.9
2015	7.6	6.2	5.2	5.7	13.8	18.8
2016	7.7	7.1	4.7	7.7	15.0	23.7
2017	7.6	6.7	5.8	7.3	14.3	17.8
2018	9.4	7.1	5.7	6.6	12.7	20.3
2019	9.6	7.5	5.5	8.2	14.8	20.6
2020	8.7	6.2	5.1	6.8	13.8	19.0