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Update from the Third Party Working Party

Simon Black (Aviva)
Robert Treen (Willis Towers Watson)

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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

- Ninth iteration of the Institute and Faculty of Actuaries Third Party Working Party (TPWP), which investigates third party motor claims (injury and property damage)
- Scope focussed on private car comprehensive (PCC) including geographical analysis
- Data representing earned premium for accident year 2017 of £7.8 billion for private car comprehensive
- This pack represents the first stage of this year's research that we anticipate presenting at the GIRO conference in October 2018

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Acknowledgements

Working Party:

Simon Black (Chair)
Stephen Dobbs
Jacqui Draper
Andrew Hancock
Sylvie Ledelliou
Li Mei
Jonathan Prout
Thomas Scales
Klaas Sijbrandij
Glen D'Souza
Chris Thompson
Richard Townsend
Robert Treen

Data contributors:

Acromas
Admiral
Advantage
Ageas
Allianz
Aviva
AXA
Co-op Insurance
Covea
Direct Line Group
Esure
NFU Mutual
LV=
RSA
Tesco Underwriting
Zurich

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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.
- Likewise we do not consider statistically valid any back engineering of individual contributors' contributions.

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Market Environment
Recap from GIRO 2017

- In last year's survey, which was based on data as at 31 December 2016, we estimated a slight increase in overall third party burning cost in 2016 with inflation since 2013 of c. 2.1% per year (0.7% since 2008).
- At an Ogden discount rate of minus 0.75% the total burning cost in 2016 is estimated to be £214 with inflation since 2013 of c. 2.8%.
- What has changed since then?

Accident Year	Burning Cost (£) – Ogden 2.5%				Ogden -0.75%
	TPD	Capped TPI	Excess TPI	Total TP	Total TP
2008	75	83	30	187	192
2009	75	95	39	209	217
2010	74	101	31	206	214
2011	66	104	30	200	206
2012	66	106	30	202	210
2013	64	89	33	186	197
2014	67	88	39	194	209
2015	71	85	38	195	210
2016	74	83	41	198	214

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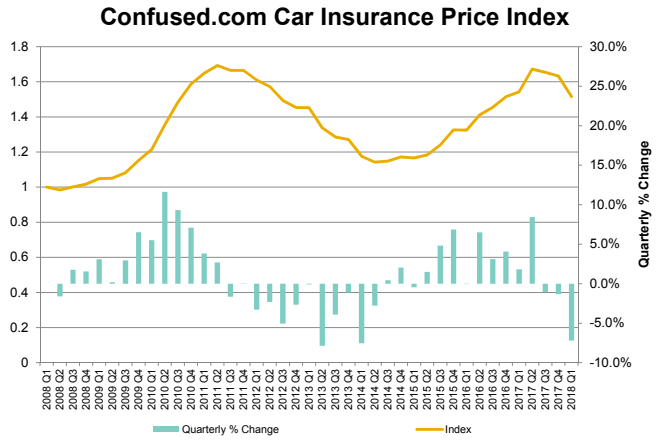
Market Environment
Motor Premium Rate Movements



- The Confused.com Car Insurance Price Index shows that Private Car Comprehensive premiums increased by 46% from 2014 Q2 to 2017 Q2 (or 14% per annum).
- This appears inconsistent with the third party burning cost, even allowing for a switch from Ogden 2.5% to Ogden -0.75%.
- However rates have begun to fall with 2018 Q1 seeing a reduction of 7%.

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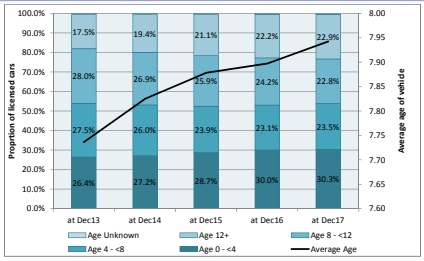
Motor Damage – claim severity

Driver assistance technology – today

SEMI-AUTONOMOUS SAFETY TECH ON UK NEW CAR REGISTRATIONS

	Fitted as Standard	Optional fitment	Total
Collision Warning System	1,071,728 (39.8%)	727,052 (27.0%)	1,798,780 (66.8%)
Parking Assistance	589,720 (21.9%)	993,638 (36.9%)	1,583,358 (58.8%)
Automatic Emergency Braking	764,751 (28.4%)	665,118 (24.7%)	1,429,869 (53.1%)
Overtaking Sensor	140,024 (5.2%)	993,638 (36.9%)	1,113,662 (42.1%)
Adaptive Cruise Control	185,802 (6.9%)	788,986 (29.3%)	974,788 (36.2%)
Blind Junction View	8,078 (0.3%)	253,121 (9.4%)	261,199 (9.7%)



- According to SMMT, nearly **70%** of new cars in the UK in 2017 had some form of driver assistance technology.
- This proportion has been growing over the past years, and will continue to grow in the future.
- The age of the average car in the UK was just under **8** years in December 2017 and has been reasonably consistent over the past five years.
- However, there has been an increase in the proportion of new cars (<4 years old) and older cars (>12 years olds).
- Hypothetically, even if prevalence of driver assistance technology in new cars ceases to increase, its prevalence in the "UK parking lot" will increase due to people renewing their cars.

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Source: DfT, Vehicle Licensing Statistics (https://www.gov.uk/government/collections/vehicles-statistics, table VEH0126)

Motor Damage – claim severity

Driver assistance technology – today

Quotes obtained by What Car? (2016-7)

- Forward collision warning for Jeep Renegade – minor bumper collision with pheasant (no visible damage) - £900
- Autonomous emergency breaking (AEB) – Volvo S90 rear bumper dent - £1,442
- Windscreen replacement with sensor calibration – Ford Fiesta - £770 (the same replacement for a 2008 model would be £156).

Car safety organisation Thatcham Research stated that the cost of replacing a windscreen on a Ford Focus is 123% higher if it's fitted with ADAS. For a Volkswagen Golf, the hike is 78%.

Repairs are not just about the fixing the hardware anymore – they are also increasingly about the software – calibration of various sensors and systems within the vehicle.

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Motor Damage – claim severity

Driver assistance technology – today

Euro NCAP testing criteria	Implementation year
Autonomous emergency breaking (first introduction)	2014
Lane Keep Assist (first introduction)	2016
Advanced lateral support systems (extension of Lane Keep Assist, e.g. lane departures resulting in crash into a fixed object)	2018

- Euro NCAP's testing criteria is a good indicator of car features that are standard, or soon to become standard, in the market place.
- The table to the left introduces some of the recent driver assistance technology that has been recently introduced.

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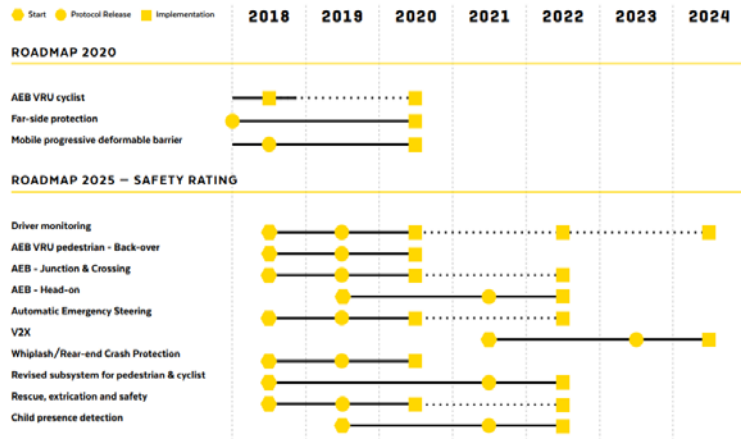
Motor Damage – claim severity

Driver assistance technology – in the future



- Euro NCAP's 5 year road map shows a number of more advanced driver assistance technology will be introduced in the coming years.
- These are likely to become wide-spread as manufacturers seek a five star rating.

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Motor Damage – claim severity

Driver assistance technology – in the future

Conclusion:

Motor repair costs will continue to increase as driver assistance technology becomes more prevalent and more complex, driven by:

1. UK drivers renewing their cars as time goes on,
2. More driver assistance technology becoming standard in more new cars,
3. More advanced driver assistance technology to be introduced in the future.

Impact on frequency:

1. BI claim frequency has been continually decreasing.
2. Motor AD and TPD claim frequency has been more ambivalent. According to ABI data, they have been relatively constant since 2014.
3. In the future state, Motor AD and TPD claim frequency may show two trends:
   a) Frequency for larger claims may decrease, due to safer cars.
   b) Frequency for smaller claims may increase, due to repairs exceeding policy excesses for even the most minor accidents.

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Market Statistics

Mileage and Fatality statistics

- There were 1,792 reported road deaths in 2016, an increase of 4 per cent compared with 2015. This is the highest annual total since 2011. There were 44 per cent fewer fatalities in 2016 compared with 2006.

- 181,384 casualties in 2016.
- 3% lower than in 2015 and the lowest level on record.
- Motor traffic levels increased by 2.2% between 2015 and 2016.
- A statistically significant decrease in the numbers of casualties from road traffic accidents between 2015 and 2016, likely to be driven by a combination of factors improving safety on Britain's roads.
- The increase in fatalities may be due to natural variation. Normalising for the warmer and drier weather in 2016, compared to the long term average, would generate only a 2% (rather than 4%) increase relative to 2015.
- Motorcyclists account for almost two thirds of the weather adjustment.

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Source https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/668504/reported-road-casualties-great-britain-2016-complete-report.pdf

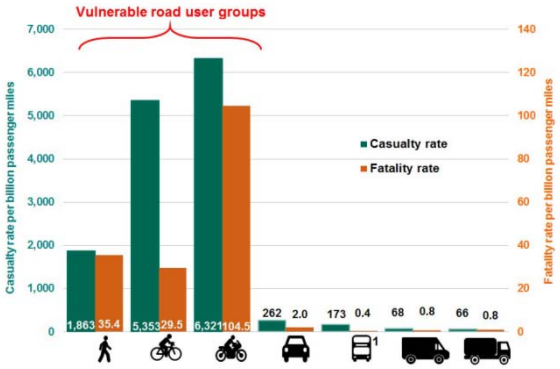
Market Statistics

Fatality statistics

Fatalities by road user type

In 2016, **car occupants** accounted for 46 per cent of road deaths, pedestrians 25 per cent, motorcyclists 18 per cent and pedal cyclists 6 per cent.

	Fatalities in 2016	% share in 2016	% change since '15	% change from '10 - '14 avg
	816	46%	∧8%	∨1%
	448	25%	∧10%	∧6%
	319	18%	∨13%	∨10%
	102	6%	∧2%	∨9%
Other	107	6%	∧4%	∧19%



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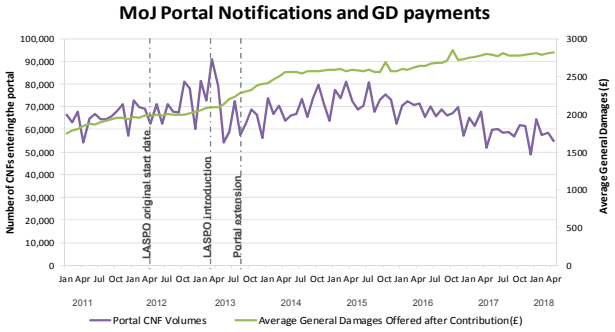
Source https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/668504/reported-road-casualties-great-britain-2016-complete-report.pdf

Capped TPI

MoJ Portal Notifications and GD payments

- The number of claims reported through the portal has been reducing since mid-2015, possibly due to past and proposed reforms.
- The level of notifications in 2016 was 7% lower than in 2015.
- The pace of the reduction increased in 2017, but in recent months the level of notifications appears to be stabilising.
- Post-LASPO General Damages payments have tended to increase in line with changes in the JC guidelines (see table)



JCB Edition	Month Published	Average Uplift
8th	Sep 2006	5.2%
9th	Sep 2008	9.6%
10th	Sep 2010	2.8%
11th	Sep 2012	9.0%
Laspo	Apr 2013	10.0%
12th	Sep 2013	2.3%
13th	Sep 2015	4.7%
14th	Sep 2017	4.8%

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Source: https://www.claimsportal.org.uk/about/executive-dashboard/

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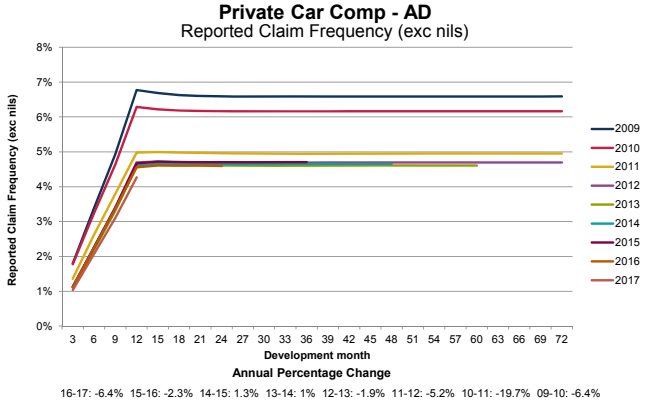
Market statistics

Claim frequency (excluding nils)



- AD frequency fell 30% from 2009 to 2012 but remained flat from 2012 to 2016.
- In 2017 frequency fell by 6.4%.
- The increase in driver assistance technology is expected to reduce claim frequency.
- It is not clear why this effect was not witnessed between 2012 to 2016 (or what other trend it was offset by) but this may be contributing to the reduction in frequency in 2017.

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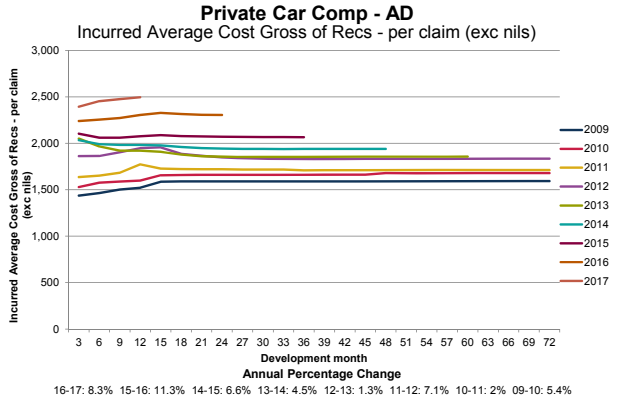
Market statistics

Incurred Average Cost Gross of Recs (excluding nils)



- Gross of salvage and subrogation AD average cost has seen steady inflation from 2009 increasing from around £1,600 to over £2,500.
- The inflation is particularly high in 2016 and 2017 at 11.3% and 8.3% respectively.
- Reasons for high inflation:
  - Increased complexity of repairs (software and hardware)
  - Exchange rate effects
  - 'Artificial' retail repair rates being charged following Coles vs Hetherton ruling.

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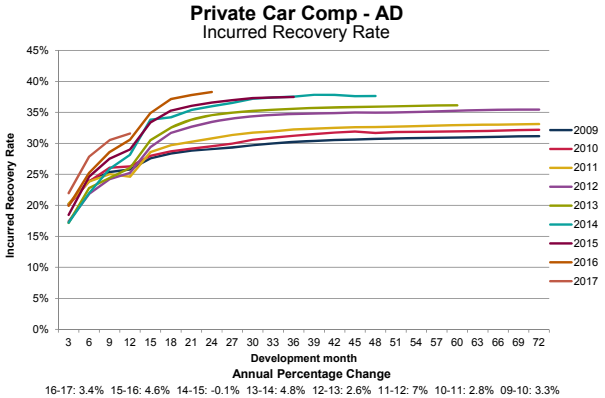
Market statistics

Incurred Recovery Rate



- Recovery rates have increased over the period.
- In the most recent years recovery rates appear in the range 37% to 40% having been below 35% from 2009 to 2011.
- Possible reason is the increased importance of revenue generated by non-fault repaid models to insurers driving more claims through recovery process.

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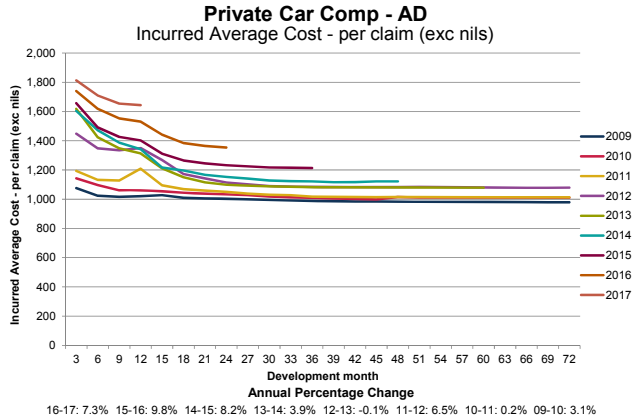
Market statistics

Incurred Average Cost Net of Recs (excluding nils)



- Increase in recovery rates mean net of salvage and subrogation average cost inflation is slightly lower than gross.
- However, inflation rates are still high at 9.8% in 2016 and 7.3% in 2017.

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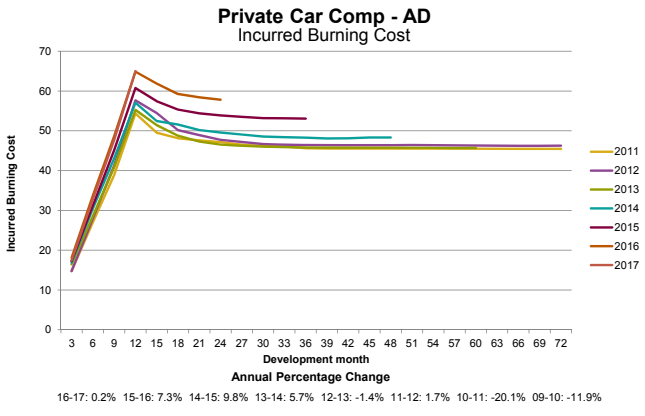
Market statistics

Incurred Burning Cost Net of Recs



- AD burning cost has increased from £46 in 2011 to £57 in 2016, an average increase of 4% per annum.
- In 2017 frequency reduction has offset claims inflation resulting in a burning cost largely the same as in 2016.

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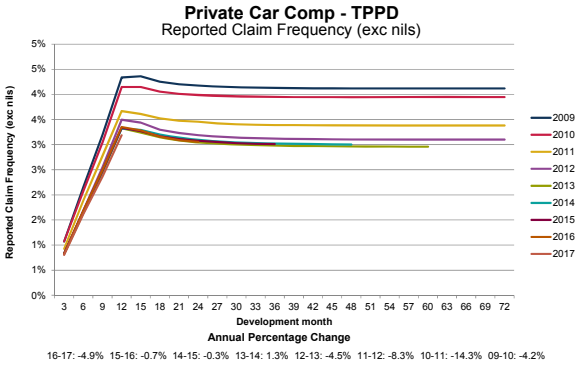
Claim frequency (excluding nils)



Year	AD	TPPD
2010	-6.4%	-4.2%
2011	-19.7%	-14.3%
2012	-5.2%	-8.3%
2013	-1.9%	-4.5%
2014	1%	1.3%
2015	1.3%	-0.3%
2016	-2.3%	-0.7%
2017	-6.4%	-4.9%

- TPPD has shown a similar frequency trend to AD with large reductions from 2009 to 2013 followed by a more stable period from 2013 to 2016.
- Both AD and TPPD has seen reductions in frequency in 2017.

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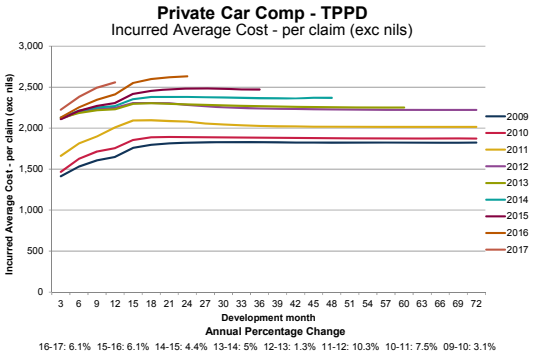
Market statistics

Incurred average Cost (excluding nils)

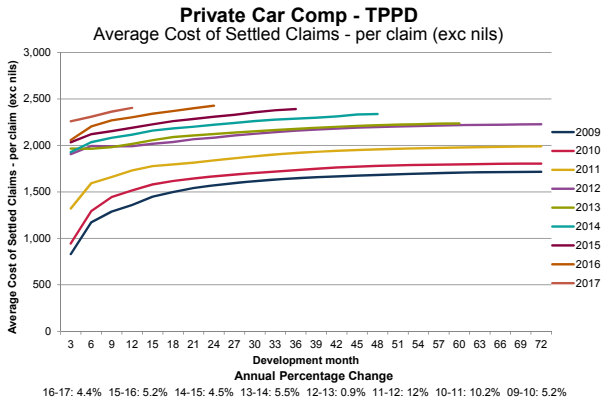


Year	AD Net	TPPD
2010	3.1%	3.2%
2011	0.2%	7.3%
2012	6.5%	10.2%
2013	-0.1%	1.4%
2014	3.9%	5.3%
2015	8.2%	4.8%
2016	9.8%	6.6%
2017	7.3%	6.2%

- From 2009 to 2017 AD Net inflation has averaged 5.5% per annum while TPPD inflation has averaged 6.2% per annum. However, AD inflation has been higher than TPPD for the last three years.
- Some possible reasons for the higher inflation on AD include nature of accidents (e.g. hit from behind resulting in higher costs at-fault driver as repaid of front of car is higher than rear) or the impact on Credit Hire on TPPD severity.

Market statistics

Settled average Cost (excluding nils)



- Settled average cost inflation for TPPD is slightly lower than for incurred average cost inflation in the last two years.

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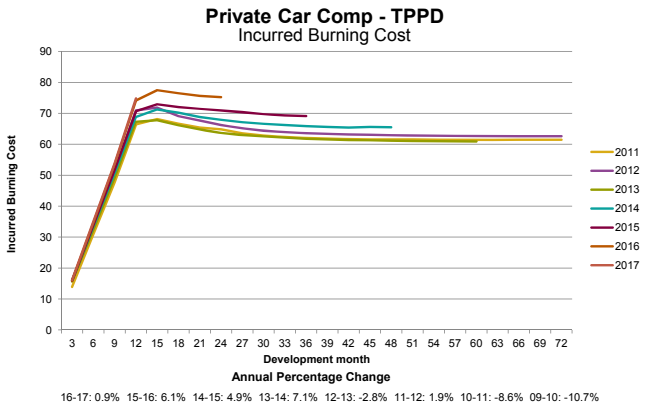
Market statistics
Incurred Burning Cost



- TPPD burning cost has increased at around 3% per annum from 2011 to 2017.
- In 2017 frequency reduction has offset claims inflation resulting in a burning cost largely the same as in 2016 as for AD

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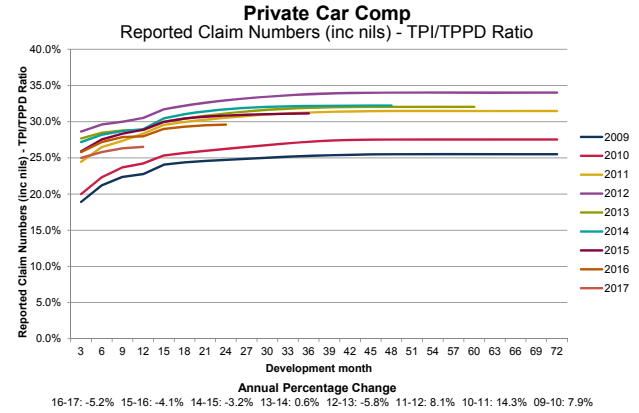
Market statistics

Ratio of TPI to TPD claim numbers (including nils)



- TPI to TPPD ratio has continued to fall from high seen in 2012.
- 2017 appears to be more consistent with 2010 year.

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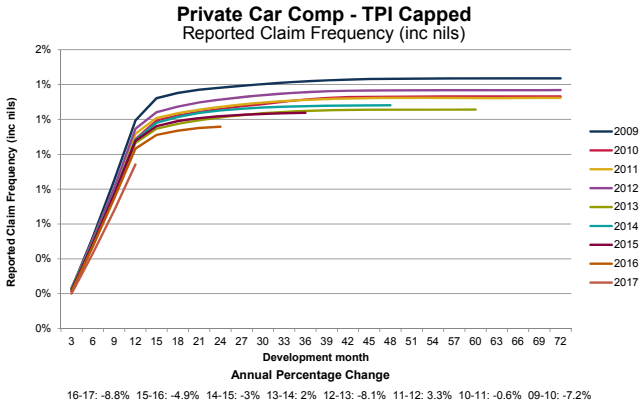
Market statistics

TPI Frequency (including nils)



- TPI has seen larger reduction in frequency than for damage claims over the last three years.
- 2017 has seen frequency fall by 8.8% (as opposed to 6.4% for AD and 4.9% for TPPD).
- Reductions in frequency in 2016 and 2017 are lower than seen notifications in MoJ Portal notifications (7% reduction in 2016 and 13% in 2017).

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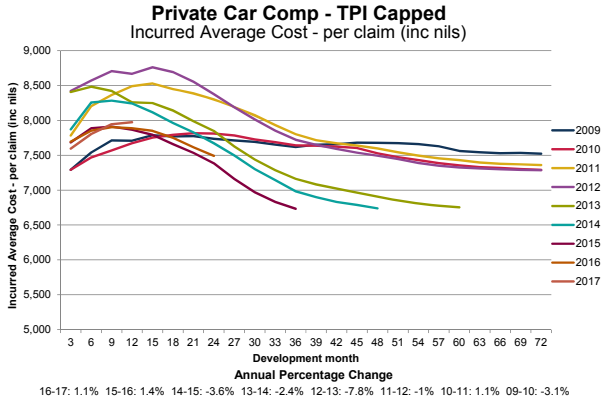
Market statistics

TPI Capped Incurred Average Cost (including nils)



- 2013, 2014 and 2015 all saw reductions in frequency following the introduction of LASPO and other related reforms.
- Inflation in 2016 and 2017 has been positive but at low rates.

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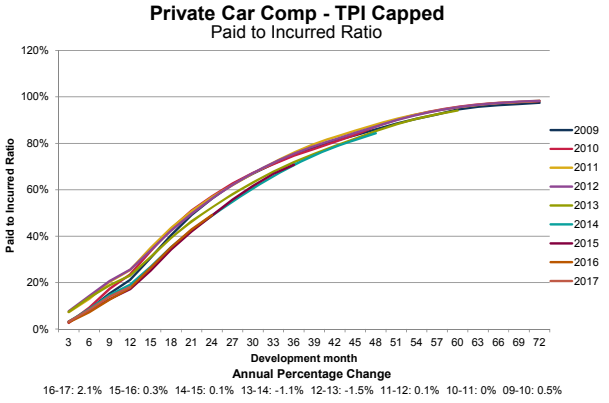
Market statistics

Paid to incurred ratio



- Still seeing a reduction in payment speed post LASPO without a corresponding reduction in settlement rate.
- Even 4 years after the start of an accident year payments are lower post LASPO than pre LASPO.

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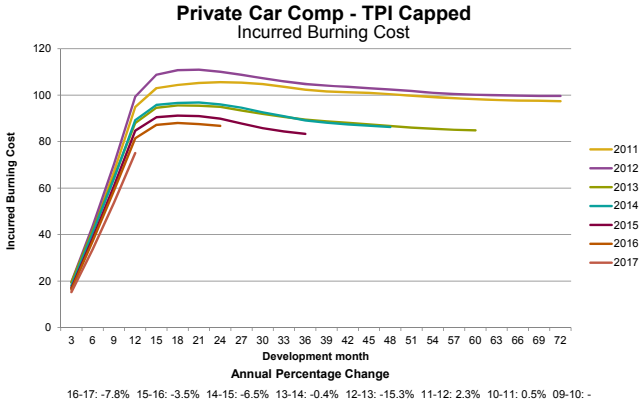
Market statistics
Incurred burning cost



- 15.3% reduction in burning cost in 2013 from LASPO.
- Significant further reductions in 2015, 2016 and 2017 driven by severity in 2015 and frequency in 2016 and 2017.
- Burning cost is 30% lower in 2017 than in 2012.

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Conclusions

- **Frequency**
  - All claim types have seen large reductions in frequency in 2017 at 6.4%, 4.9% and 8.8% for AD, TPPD and TPI respectively.
- **Severity**
  - AD and TPPD experiencing high inflation.
  - AD in particular is very high in the last two years.
  - Increased level of technology in cars is likely to be a key contributor to this level of inflation.
  - TPI capped inflation low in 2017.
- **Burning cost**
  - In 2017 burning cost was flat for AD and TPPD with frequency reductions offsetting severity increases.
  - TPI Capped burning cost in 2017 8% down.

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Conclusions

- Overall burning cost at Ogden 2.5% increased from £242 in 2014 to £252 in 2017, an increase of 1.4% per annum.
- The equivalent 2017 burning cost at Ogden -0.75% is estimated to be £269. This is an increase of 3.6% per annum from the Ogden 2.5% burning cost in 2014.
- Overall claims trends do not appear consistent with premium changes from 2014 to 2017.

Accident Year	Burning Cost (£) – Ogden 2.5%					Ogden -0.75%
	AD	TPD	Capped TPI	Excess TPI	Total AD + TP	Total AD + TP
2008	66	75	83	30	254	258
2009	64	75	95	39	273	281
2010	57	74	101	31	263	271
2011	45	66	104	30	245	251
2012	46	66	106	30	248	256
2013	46	64	89	33	232	243
2014	48	67	88	39	242	257
2015	53	71	85	38	247	263
2016	57	74	83	41	255	271
2017	57	75	76	*44*	*252*	*269*

- Note for 2016 and prior accident years we have taken projected ultimate figures from last year's study and so are based on data as at 31 December 2016. The 2017 burning cost are calculated applying the inflation observed in the latest data to the 2016 values. We have not analysed TPI Excess claims and so the 2017 figure is simply a continuation of the trend observed from 2015 to 2016.

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Appendix

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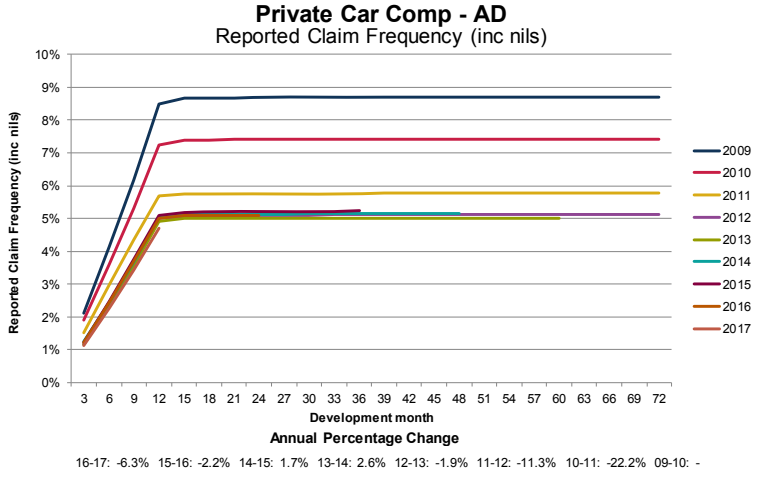
Market statistics

Claim frequency (including nils)



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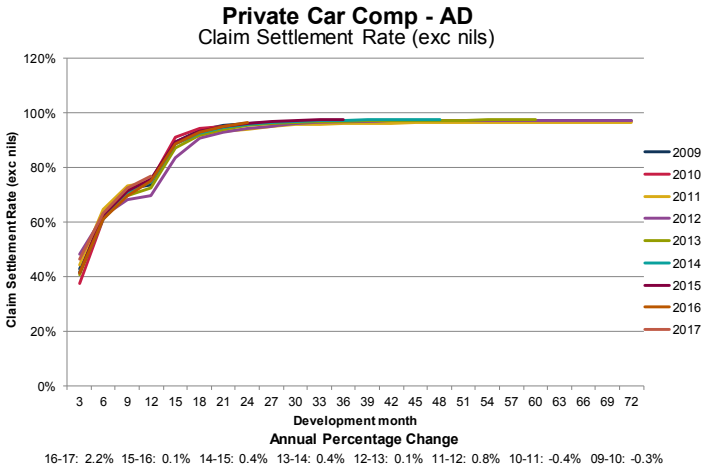
Market statistics

Settlement Rate (excluding nils)



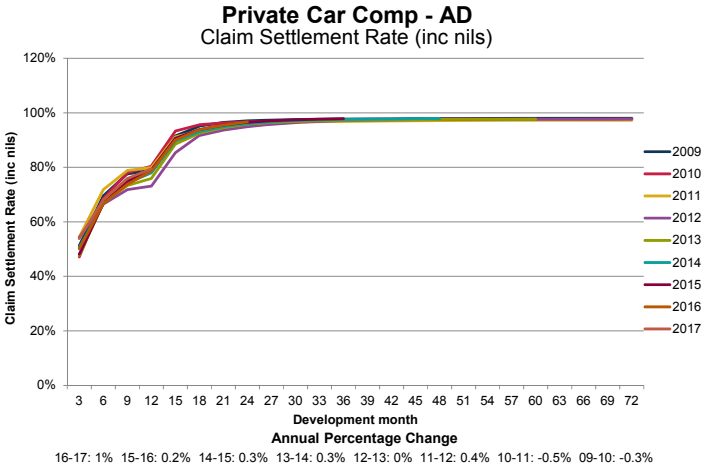
Annual Percentage Change

16-17: 2.2% 15-16: 0.1% 14-15: 0.4% 13-14: 0.4% 12-13: 0.1% 11-12: 0.8% 10-11: -0.4% 09-10: -0.3%

Institute and Faculty of Actuaries

Market statistics

Settlement Rate (including nils)



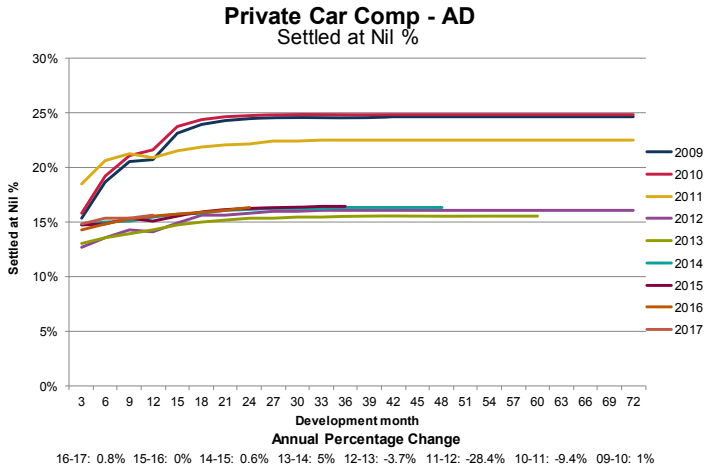
Annual Percentage Change

16-17: 1% 15-16: 0.2% 14-15: 0.3% 13-14: 0.3% 12-13: 0% 11-12: 0.4% 10-11: -0.5% 09-10: -0.3%

Institute and Faculty of Actuaries

Market statistics

Settled at Nil %



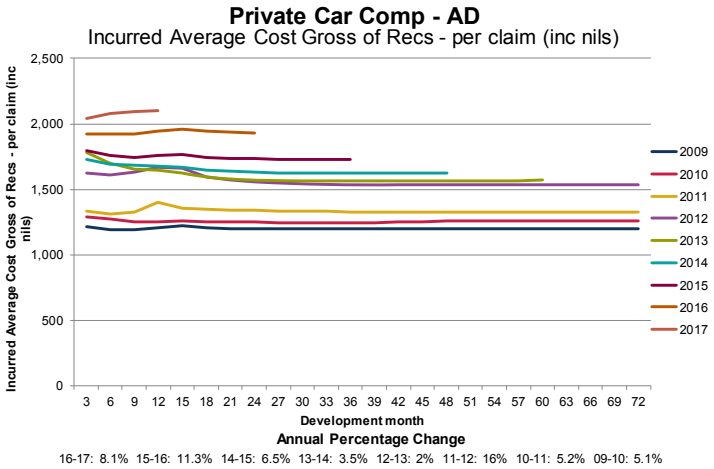
Annual Percentage Change

16-17: 0.8% 15-16: 0% 14-15: 0.6% 13-14: 5% 12-13: -3.7% 11-12: -28.4% 10-11: -9.4% 09-10: 1%

Institute and Faculty of Actuaries

Market statistics

Incurred Average Cost Gross of Recs (including nils)



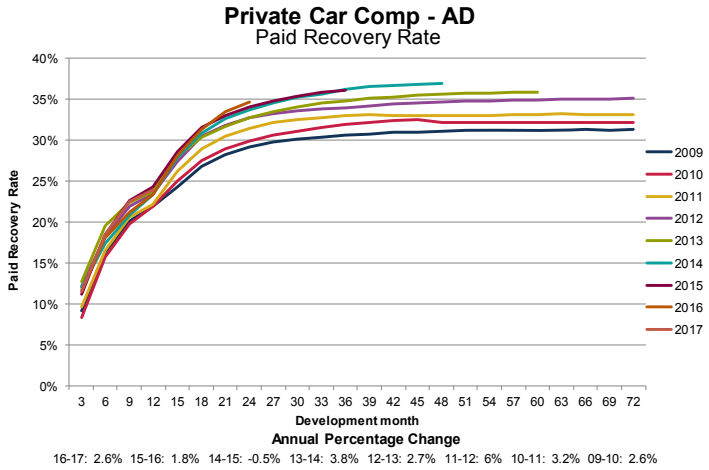
Annual Percentage Change

16-17: 8.1% 15-16: 11.3% 14-15: 6.5% 13-14: 3.5% 12-13: 2% 11-12: 16% 10-11: 5.2% 09-10: 5.1%

Institute and Faculty of Actuaries

Market statistics

Paid Recovery Rate



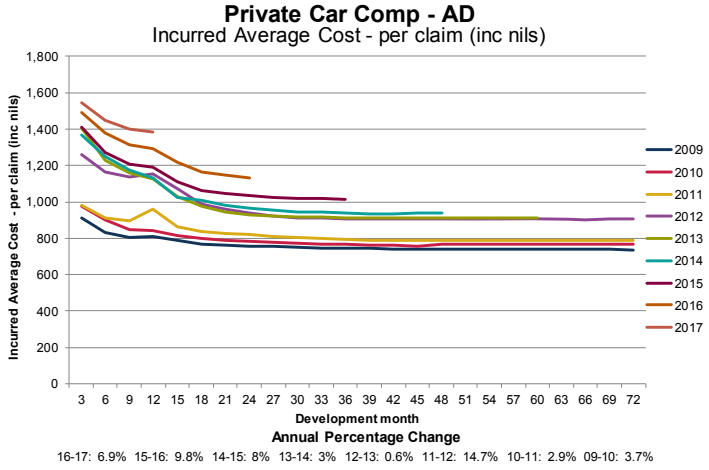
Annual Percentage Change

16-17: 2.6% 15-16: 1.8% 14-15: -0.5% 13-14: 3.8% 12-13: 2.7% 11-12: 6% 10-11: 3.2% 09-10: 2.6%

Institute and Faculty of Actuaries

Market statistics

Incurred Average Cost Net of Recs (including nils)



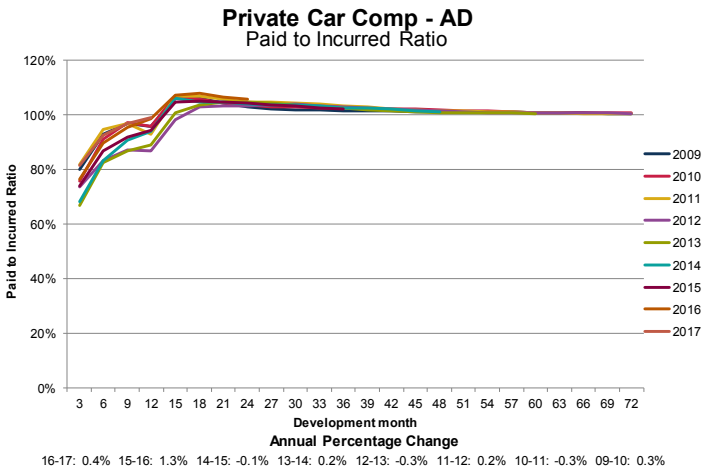
Annual Percentage Change

16-17: 6.9% 15-16: 9.8% 14-15: 8% 13-14: 3% 12-13: 0.6% 11-12: 14.7% 10-11: 2.9% 09-10: 3.7%

Institute and Faculty of Actuaries

Market statistics

Paid to Incurred Ratio Net of Recs



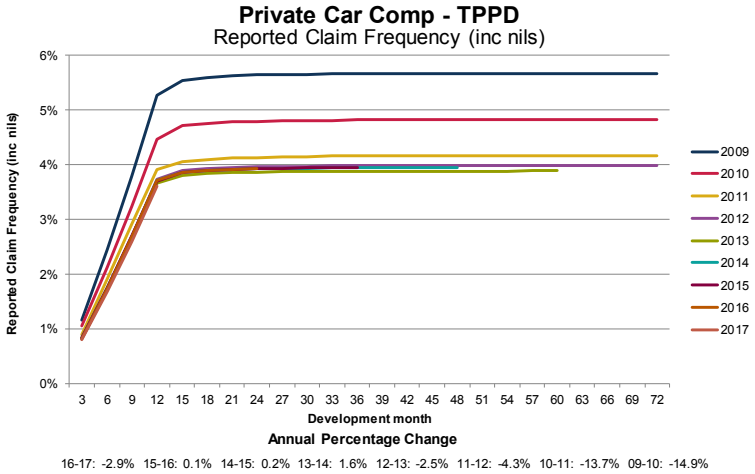
Annual Percentage Change

16-17: 0.4% 15-16: 1.3% 14-15: -0.1% 13-14: 0.2% 12-13: -0.3% 11-12: 0.2% 10-11: -0.3% 09-10: 0.3%

Institute and Faculty of Actuaries

Market statistics

Claim frequency (including nils)



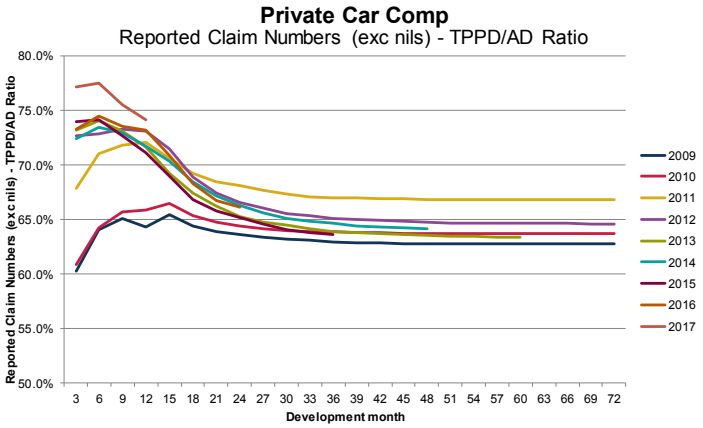
Annual Percentage Change

16-17: -2.9% 15-16: 0.1% 14-15: 0.2% 13-14: 1.6% 12-13: -2.5% 11-12: -4.3% 10-11: -13.7% 09-10: -14.9%

Institute and Faculty of Actuaries

Market statistics

Ratio of TPPD to AD claim numbers (excluding nils)



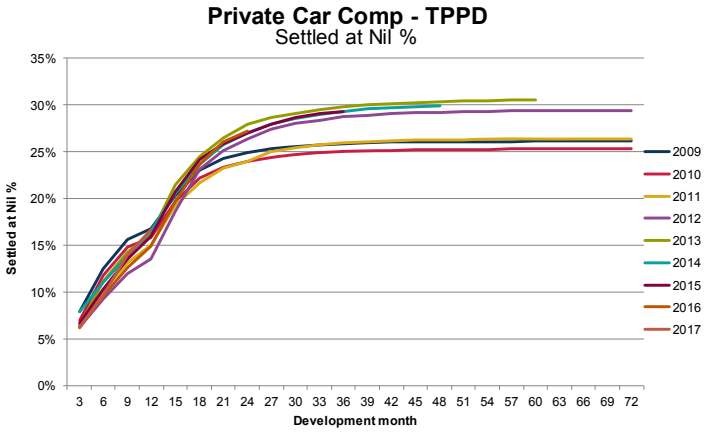
Annual Percentage Change

16-17: 1.3% 15-16: 1.6% 14-15: -1.5% 13-14: 1% 12-13: -1.9% 11-12: -3.2% 10-11: 4.8% 09-10: 1.5%

Institute and Faculty of Actuaries

Market statistics

Settled at Nil %



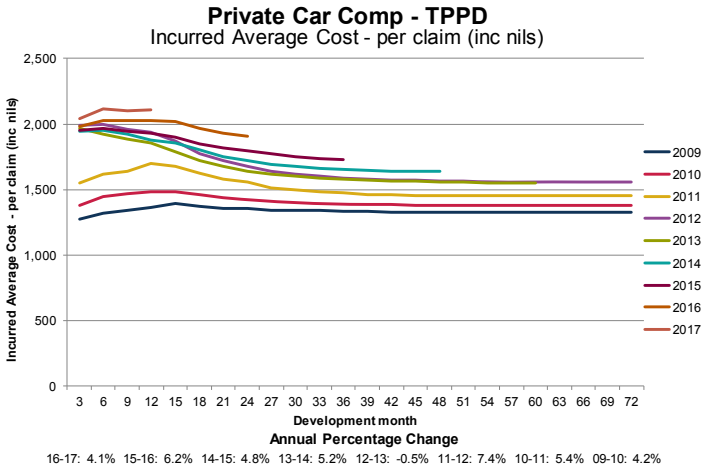
Annual Percentage Change

16-17: 12% 15-16: 0.6% 14-15: -0.1% 13-14: -1.4% 12-13: 4% 11-12: 11.4% 10-11: 4.3% 09-10: -3.2%

Institute and Faculty of Actuaries

Market statistics

Incurred average Cost (excluding nils)



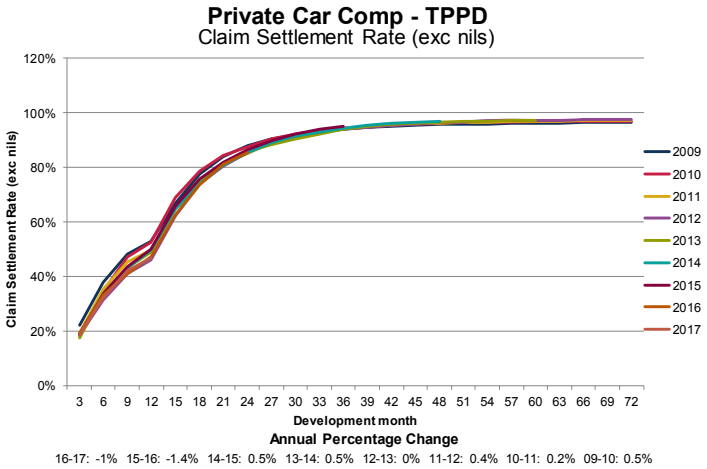
Annual Percentage Change

16-17: 4.1% 15-16: 6.2% 14-15: 4.8% 13-14: 5.2% 12-13: -0.5% 11-12: 7.4% 10-11: 5.4% 09-10: 4.2%

Institute and Faculty of Actuaries

Market statistics

Settlement Rate (excluding nils)



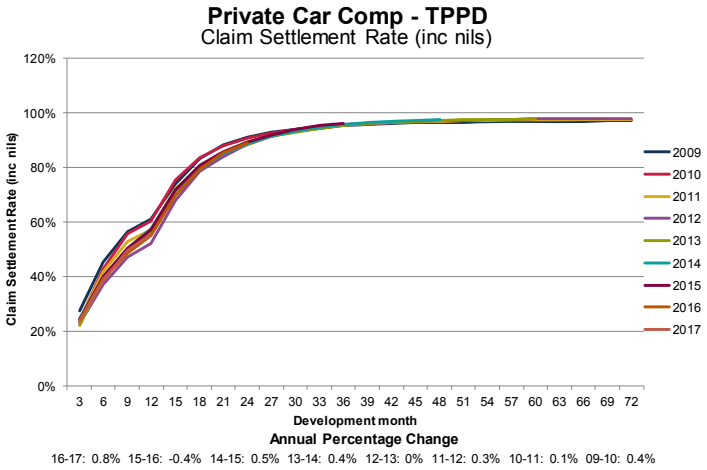
Annual Percentage Change

16-17: -1% 15-16: -1.4% 14-15: 0.5% 13-14: 0.5% 12-13: 0% 11-12: 0.4% 10-11: 0.2% 09-10: 0.5%

Institute and Faculty of Actuaries

Market statistics

Settlement Rate (including nils)



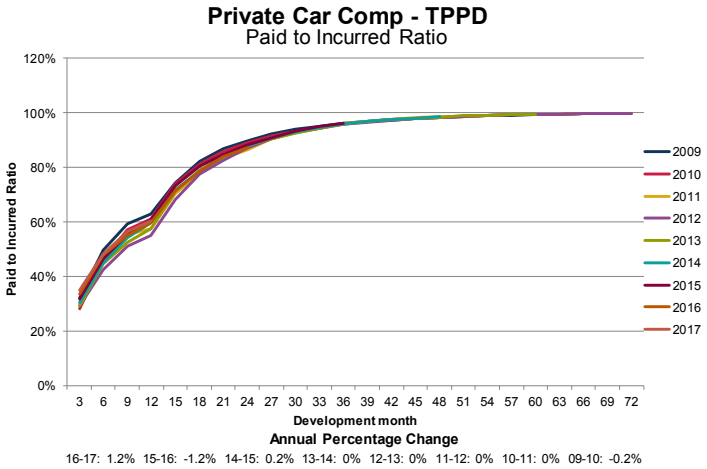
Annual Percentage Change

16-17: 0.8% 15-16: -0.4% 14-15: 0.5% 13-14: 0.4% 12-13: 0% 11-12: 0.3% 10-11: 0.1% 09-10: 0.4%

Institute and Faculty of Actuaries

Market statistics

Paid to Incurred Ratio



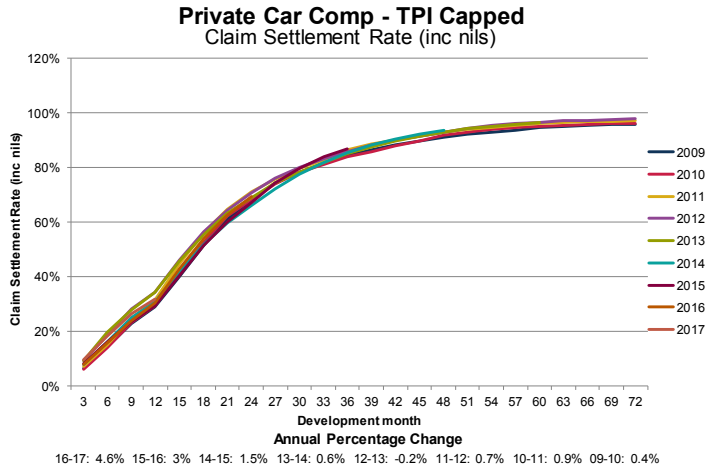
Annual Percentage Change

16-17: 1.2% 15-16: -1.2% 14-15: 0.2% 13-14: 0% 12-13: 0% 11-12: 0% 10-11: 0% 09-10: -0.2%

Institute and Faculty of Actuaries

Market statistics

TPI Settlement Rate (including nils)



Institute and Faculty of Actuaries