Periodical Payment Orders Working Party Update

GIRO 2015 Report

by the Periodical Payment Orders Working Party

Public Report

24 August 2016

Industry Survey

Contents

1   Introduction

1.1   Release

The data for this survey was taken as at 31 December 2014. This release of the 2015 PPO Working Party survey analysis supersedes any prior publication.

Similar studies have been published by the PPO Working Party annually since 2010. Each year the mix of insurers has changed and every year the data provided for previous studies is ignored and the analysis uses a new full historic snapshot from each of the contributors. The data between surveys will not be directly comparable as a different mix of insurers will have contributed to each successive survey. Changes in claim classification by insurers can also lead to a difference in the re-based results.

1.2   Contributors

We have received data comprising 442 Motor Periodical Payment Orders (PPOs) and 50 Liability PPOs (492 PPOs in total), we also received 144 MIB PPOs. The insurers surveyed account for over 90% of the PRA regulated market (based on 2014 gross premium volumes) for motor, including personal and commercial insurance, comprehensive and non-comprehensive covers. In addition, there are further companies which contribute to the survey but do not appear in the 2014 PRA returns.

We are very grateful to all the contributors without whom the survey would simply not be possible.

The following contributing insurers would like to be acknowledged for their participation in the survey (though this list does not include all contributors):

- Ageas (AIL)
- AIG
- Allianz Insurance
- Aviva
- AXA
- Covea
- CFS
- Direct Line Group
- esure
- Liverpool Victoria
- RSA
- Saga
- Tesco Underwriting
- Zurich Insurance

1.3 Executive Summary

The headline results from this year's survey are (all comments relate to non-MIB claims unless stated):

- The number of claims settling as a PPO has fallen for 2014.
  - The total number of PPO settlements in 2014 is 24% lower than in 2013 and 34% lower than the average over the previous five years (2009 to 2013). However, it is not possible determine if this is an indication of a trend or volatility.
- PPO propensity has reduced in 2014, albeit not to the same extent as the number of PPOs.
  - The reduced impact on propensity is due to a reduction in large claims settlements.
  - Motor PPO propensity for 2014 is 23% compared to 32% for 2013 and the 34% average over the previous five years.
  - Liability PPO propensity for 2014 is 9% compared to 6% in 2013 and an average of 17% over the previous five years, but the small volume of data gives rise to significant volatility, so no solid conclusions can be made.
  - There are a number of potential explanations for the PPO propensity reduction, including volatility.
- Average delay to settlement of a PPO (from accident date) has remained broadly consistent in the 2010 through 2014 calendar years at between 6 and 6.5 years.
- The average life expectancy for claimants is 43 years from settlement across all PPOs, both Motor and Liability. For Motor PPOs the equivalent figure is 45 years.
- We have seen big differences in the number of variation orders and reverse indemnity guarantees compared to previous reports.
  - 21% of Motor PPOs now appear to have variation orders, although this may be due to our data template being filled in differently than it has been previously by some insurers.
- Average PPO lump sums and periodic payment amounts have increased in 2014.
  - The average lump sum amount across all PPOs, both Motor and Liability, is £1.6 million and the average periodic payment is £77,000. For Motor PPOs the equivalent figures are £1.7 million and £78,000 respectively.
  - Motor PPOs continue to cost more than Liability PPOs and are also paid for longer durations.
  - Private Motor PPOs have lower annual payments than Commercial Motor PPOs, but are paid for longer durations due to younger claimants.
  - Spinal injury PPOs have higher lump sum amounts and annual payments due to the higher care regime, but PPOs associated with Brain injuries have longer durations as they are more common for younger claimants.
- The proportion of total Motor PPOs that are settled by the MIB remains between 15%-25% per year
  - The average age of a MIB PPO claimant is higher than that of an Industry PPO claimant
  - Industry Motor PPOs have a higher average lump sum and annual payment than MIB PPOs
  - The life expectancy of PPO claimants is higher in respect of Industry PPOs when compared to MIB PPOs

- Although there is very limited data on which to base any firm conclusions, we have investigated the number of deaths among PPO claimants since settlement. Our initial findings are discussed in section 9 of this report.

1.4 Contact

If you have any questions regarding the survey, including requests for information or statistics from the data that are not published within this document, please contact Sharon Cumberbatch at the Institute and Faculty of Actuaries (Sharon.Cumberbatch@actuaries.org.uk) in the first instance, who will put you in contact with the PPO Working Party.

2   Number and Propensity of PPOs

2.1   Number of PPOs

Figure 2.1 below shows the total number of PPOs (Motor and Liability combined) settled in each quarter from 2005 to the end of 2014.

Number Of PPOs By Settlement Quarter
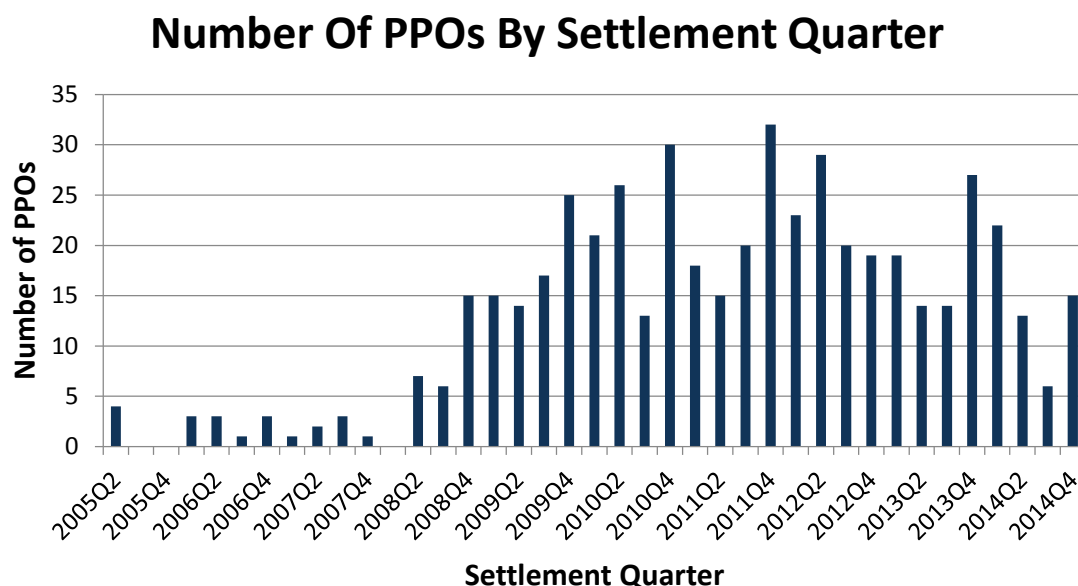
Figure 2.1: Total number of PPOs by Settlement Quarter

If we look at these figures on an annualised basis in Figure 2.2 below, the number of PPOs settled each year has exhibited a decreasing trend since the relatively stable level between 2010 and 2012. There are many potential reasons for this reduction, and because of this uncertainty, combined with the on-going Ogden discount rate uncertainty and the continuing low interest rate environment; it is not possible to know whether this is a trend that will continue or not.

Number Of PPOs By Settlement Year

Figure 2.2: Number of Motor and Liability PPOs by Settlement Year

The potential causes of a reduction in the number of PPOs are discussed in the PPO Propensity section, which considers the reduction relative to the trend in the number of large claims.
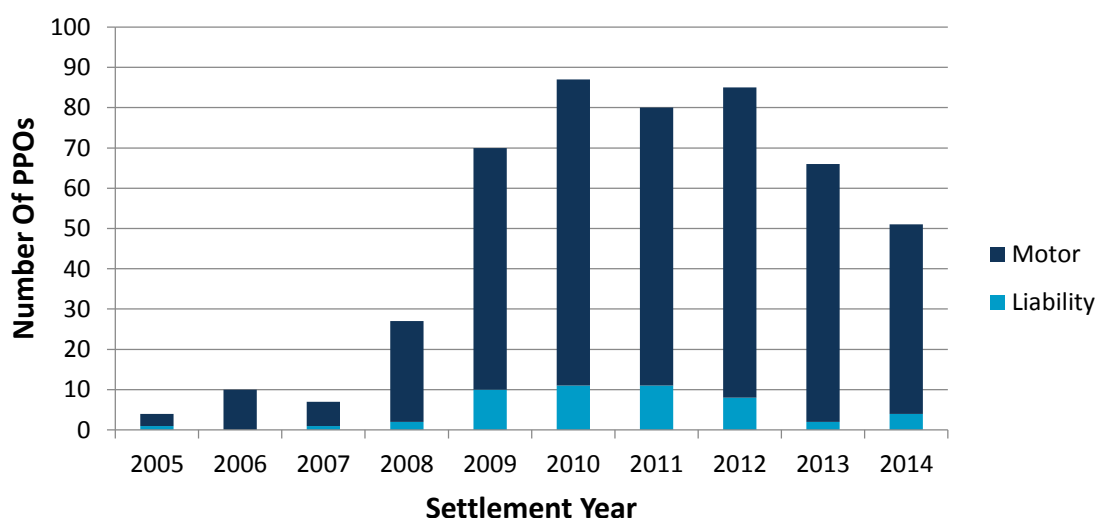
Figure 2.3 shows (for each settlement year) the proportion of the year's PPOs that settle in each quarter. The previously observed trend of settling more PPOs in the fourth quarter has not continued in 2012 and 2014. There is a trend for more PPOs to settle in the first quarter of the year. These variations are heavily subject to volatility due to the small number of PPOs settling each year.

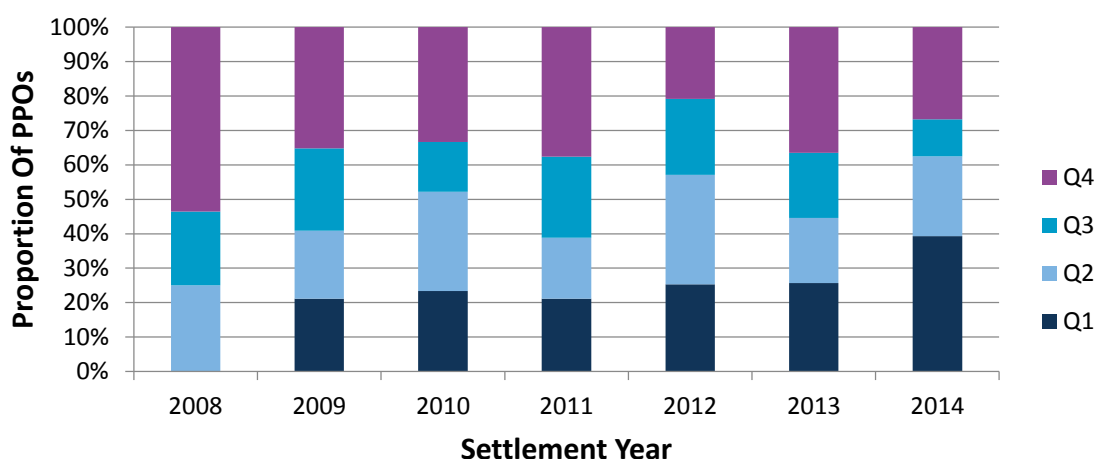# Proportion Of PPOs That Settle In Each Quarter

Figure 2.3: Proportion of total PPOs that settle in each Quarter, by Settlement Year

However, since the ASHE index is published during Q4, it is unsurprising that there continue to be more PPOs that commence payment in this quarter, as it ensures that the payments more accurately reflect inflation in ASHE. This is shown in Figure 2.4 below.
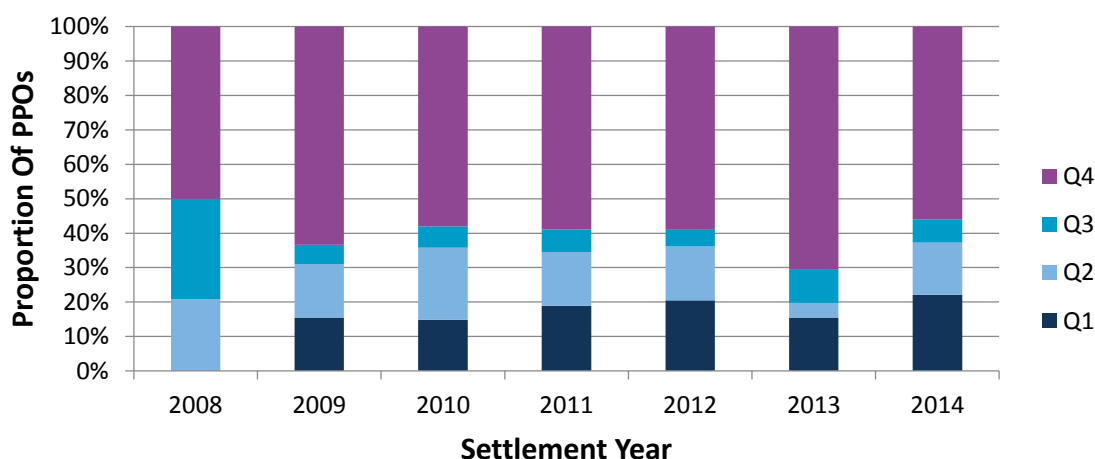
Proportion Of PPOs That Start In Each Quarter

Figure 2.4: Proportion of total PPOs that are paid in each quarter, by first payment year

2.2   Motor PPO Propensity

We received some data for individual large claims settled since 2008, which has enabled us to investigate the propensity of PPOs as a proportion of large claims. The definition of a large claim is greater than £1 million in 2011 values, indexed at 7% per settlement year.

Figure 2.5 below shows Motor PPO propensity as a proportion of large claims. It only considers PPOs with a value above £1million (indexed in the same way as the large claims), and these are included in the exposure bars. For the whole of Section 2, PPOs have been valued using a real discount rate of 2.5% (unless stated otherwise) so that the figures are comparable to traditional lump sums that will have been valued using the current Ogden discount rate of 2.5%.

The values of the PPOs have been estimated using a consistent basis, so that the effect of different reserving basis for different insurers is removed. However, the valuation assumes the life expectancy provided by the insurer, the basis for which differs between insurers
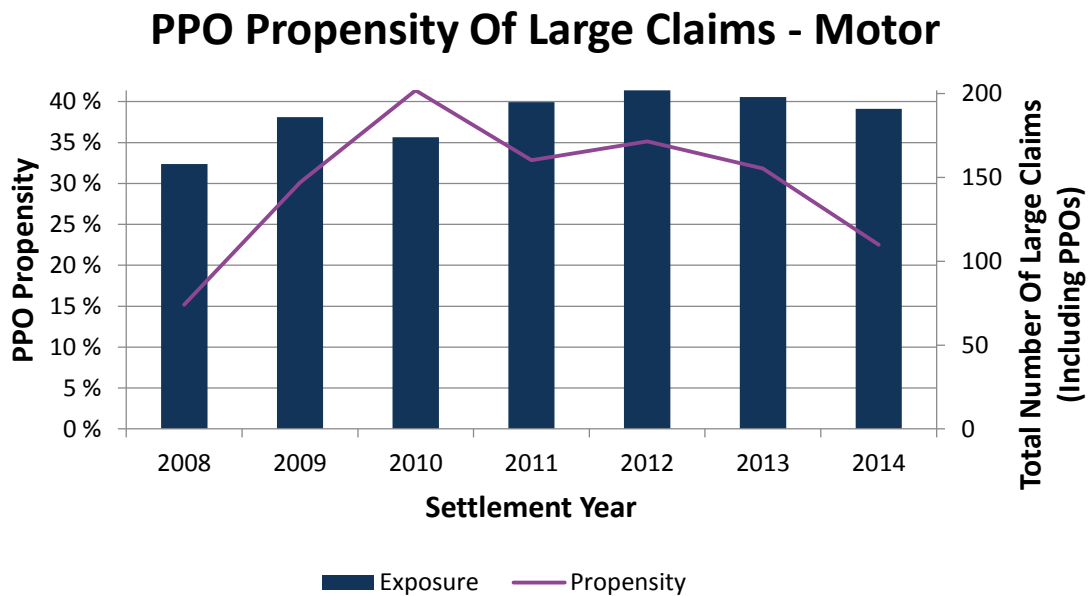
PPO Propensity Of Large Claims - Motor

Figure 2.5: Proportion of Motor large claims that settle as a PPO, by Settlement Year

The definition of large claims, as well as the definition of which large claims are settled, is unlikely to be consistent between all contributors. Further to this we noticed that the large claim count for some insurers is not consistent with that provided last year. This is due to a change in basis as well as expected changes caused by the reopening of claims. Consequently, the number of large claims and re-based PPO propensity differ from results from previous surveys.

The dip in the overall number of large claims settled in 2010 (and a correspondingly higher PPO propensity for that settlement year) may have been caused by the Ogden discount rate review announcement which may have led to deferment of settlement for some large claims whilst the outcome of the decision is awaited.

The Motor PPO Propensity for settlement years 2009, 2011, 2012 and 2013 is broadly stable, but there has been a reduction in 2014. The reduction in the number of PPOs has outweighed the reduction in the number of large claims settling during 2014, resulting in a reduced PPO propensity.

Reasons for reduced propensity

There are a number of potential causes for this Motor PPO Propensity reduction:

- Data collection issue
  - Whilst it's possible for it to be a data issue, Figure 2.3 suggests that there is not an issue with PPOs settling late in 2014 not being reported. In particular, the data collection was performed as at March 2015.

- Driven by particular insurer
  - There is a possibility that the overall reduction is caused by just one or two large contributors. As there has been a change in the mix of insurers contributing this year this is a valid possibility.

- Not all insurers saw a reduction in propensity in 2014, and of those that did, some experienced a greater drop than others. The insurers with the most large claims all saw a reduction in propensity.

- Volatility (not a trend)
    - Figure 2.1 shows how PPO settlements are volatile by quarter. Furthermore, the number of PPOs and large claims divided by each settlement year creates relatively small samples.

- Impact of Ogden discount rate consultations
    - However, the peaks and troughs in PPO settlements as shown in Figure 2.1 may be driven by external factors, such as the impact of the Ogden discount rate consultation announcements.
    - There has been a volatile but noticeable fall in PPO settlements since 2012 Q3, when the first Ogden discount rate consultation began in August 2012. A second discount rate consultation in February 2013, publication of personal injury research in September 2013, and general lack of a resolution may have contributed to a fall in PPO settlements whilst an outcome is awaited.

- Run-off of a backlog of claims with potential to settle as a PPO
    - It may be that a backlog of potential PPO claims that arose when the legislation was first introduced has now been cleared.
    - At the start, there would have been more claims outstanding in old prior years waiting for a PPO settlement to come through, and now we may be returning to the long run average and the new lower rate will persist.

- Insurer claims management behaviour
    - It may be that insurers' claims management practices have changed such that insurers are settling a higher proportion of potential PPO claims as traditional lump sum settlements.
    - Since PPOs can be imposed by the court, the claimants would likely also have to be in favour of this change.
    - Our recent qualitative survey which was presented at CIGI found that insurers' concern levels have generally remained the same.
        - This could be caused by them being able to avoid PPOs easier, but equally does not suggest a driver for trying to avoid them more.

- Claimant appetite for PPOs.
    - Most PPOs are driven by the needs of the claimant, and recent research published in September 2013 carried out by the Ipsos MORI Social Research Institute on behalf of the Ministry of Justice Analytical Services ("Personal Injury Discount Rate Research", http://www.justice.gov.uk/publications/research-and-analysis/moj, 2013) suggested that a lump sum can be in the best interest of the claimant in many circumstances.

o   Due to changes in the economic outlook, claimants and their advisers may be taking a different view about the extent to which they are able to generate a superior income by investing lump sum settlements.

Motor PPO Propensity by claim size

Figures 2.6 to 2.9 show Motor PPO propensity under different large claims thresholds. As above, the thresholds are indexed back at 7% per settlement year. The graphs below are shown using two different sets of bandings ("a" and "b"). Note there are no large claims above £25 million in the survey.

Figures 2.6 and 2.7 only consider large claims and PPOs from the 2009 settlement year onwards since, as shown in Figure 2.5 above, propensity levels in 2008 were at a much lower level than subsequent settlement years following the landmark case of Thompstone vs Tameside.

Motor PPO Propensity by claim size – incremental thresholds

It can be seen in Figure 2.6(a) below, that the larger the claim, the more likely it is to have settled as a PPO, with (across all settlement years) 16% of claims in the £1million to £2million bracket settling as PPOs and 64% of claims greater than £5million settling as PPOs. There are some PPOs which have settled for a value less than £1 million (only 2% of all motor PPOs during or after 2008), but since there are very few of these, the probability of a claim less than £1 million to settle as a PPO is deemed insignificant.
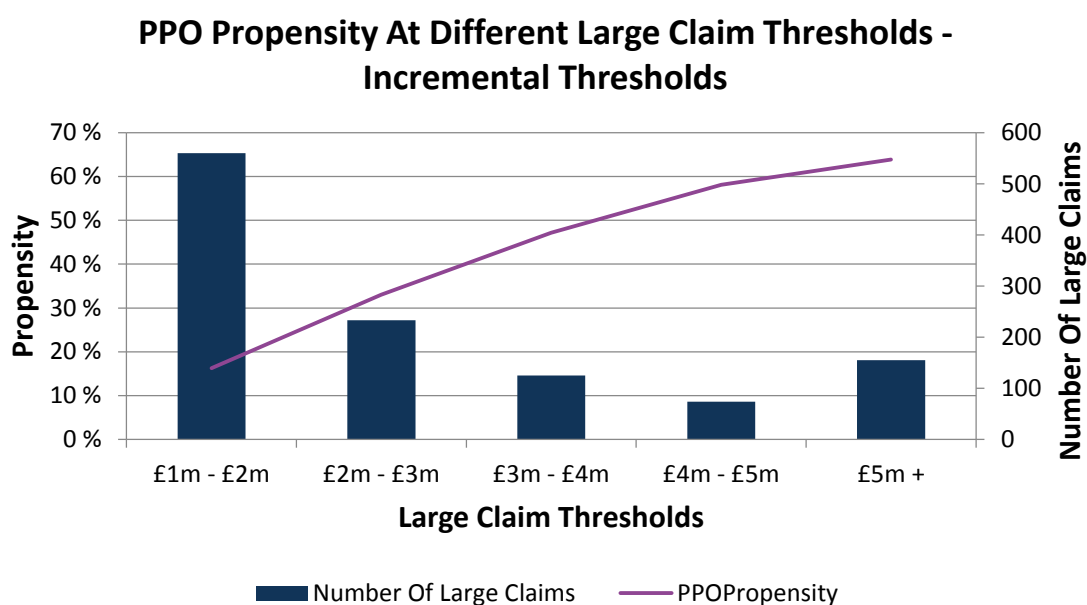
PPO Propensity At Different Large Claim Thresholds - Incremental Thresholds

Figure 2.6(a): Motor PPO propensity by large claim threshold bands (settled since 2009 only)

PPO Propensity At Different Large Claim Thresholds - Incremental Thresholds
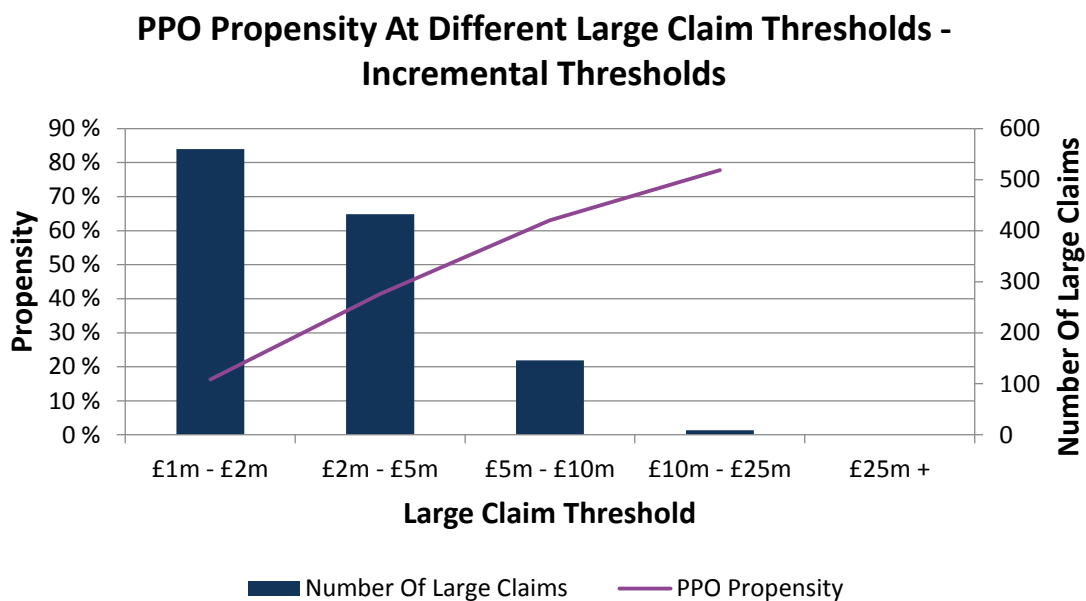
Figure 2.6(b): Motor PPO propensity by large claim threshold bands (settled since 2009 only)

Motor PPO Propensity by claim size – cumulative thresholds

The following graphs in Figure 2.7(a) and (b) show the same information but on a cumulative basis. The propensity for large claims greater than £1million to settle as a PPO (across all settlement years) is 32%, however when considering only claims above £2million the propensity rises to 47%.

PPO Propensity At Different Large Claim Thresholds - Cumulative Thresholds

Figure 2.7(a): Motor PPO propensity by cumulative large claim threshold (settled since 2009 only)

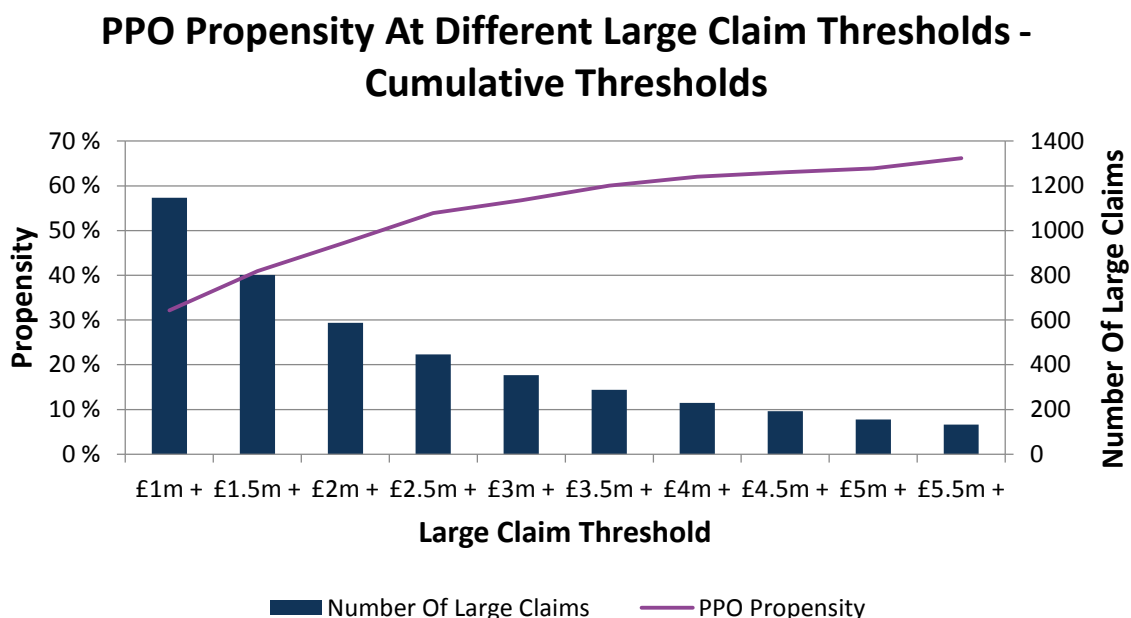## PPO Propensity At Different Large Claim Thresholds - Cumulative Thresholds
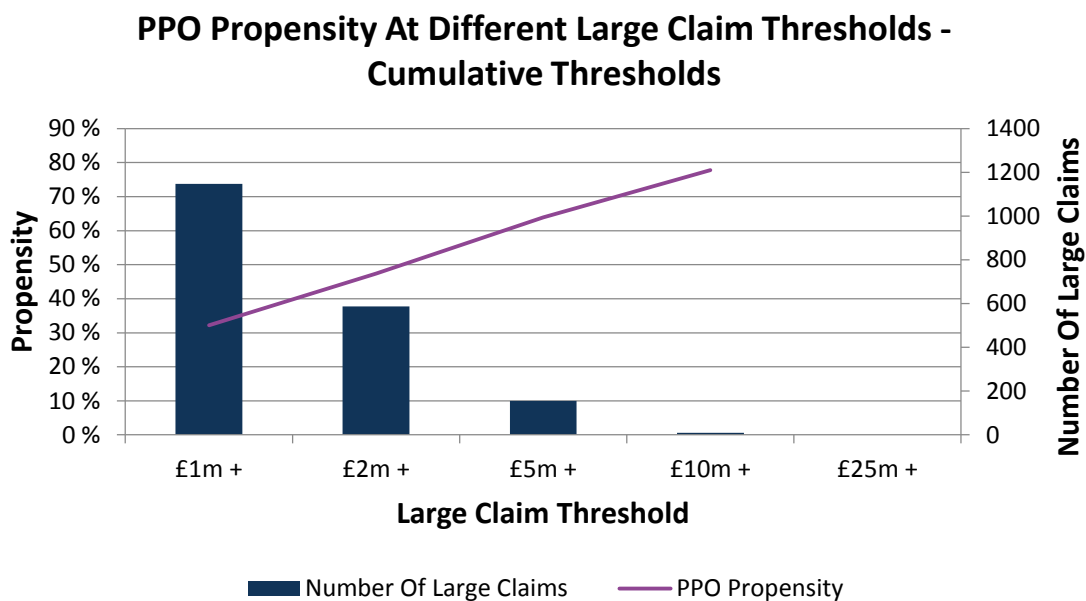
Figure 2.7(b): Motor PPO propensity by cumulative large claim threshold (settled since 2009 only)

Motor PPO Propensity by claim size, by settlement year – incremental thresholds

Figures 2.8(a) and (b) below show the PPO propensity by threshold size for settled claims, split by settlement year. In 2008, the propensity was significantly lower than that experienced in later years. At larger thresholds there are significantly fewer claims which means there will be more variability in the propensity measure at these thresholds.
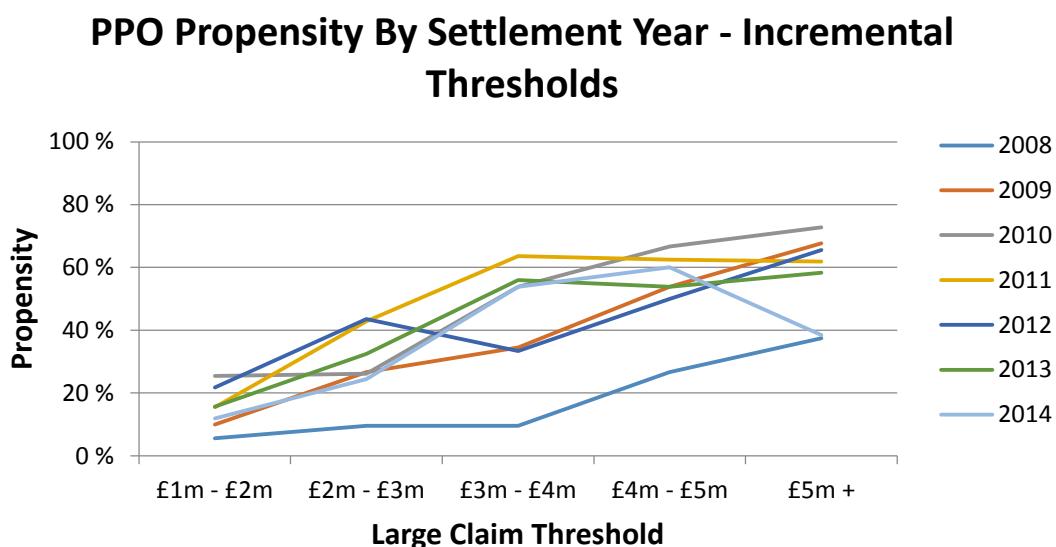
PPO Propensity By Settlement Year - Incremental Thresholds

PPO Propensity By Settlement Year - Incremental Thresholds
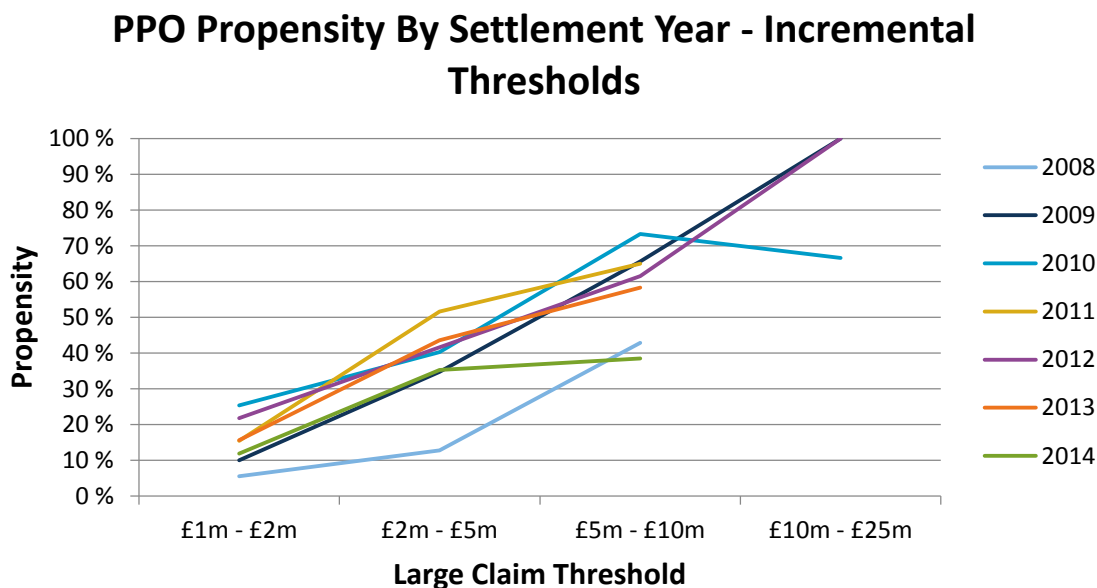
Figure 2.8(b): Motor PPO propensity by large claim thresholds split by settlement year – incremental

Motor PPO Propensity by claim size, by settlement year – cumulative thresholds

Figures 2.8 (a) and (b) show that the PPO propensity for smaller large claims (£1m-£2m) was lower in 2014, but also the propensity for the larger large claims (£5m+) was a lot lower than in previous settlements years.

Figures 2.9(a) and (b) below show the same information on a cumulative basis. The graph suggests that the PPO propensity for higher claim thresholds has reduced in 2014. This could be down to volatility or a trend. At this point it is hard to say.

PPO Propensity By Settlement Year - Cumulative Thresholds
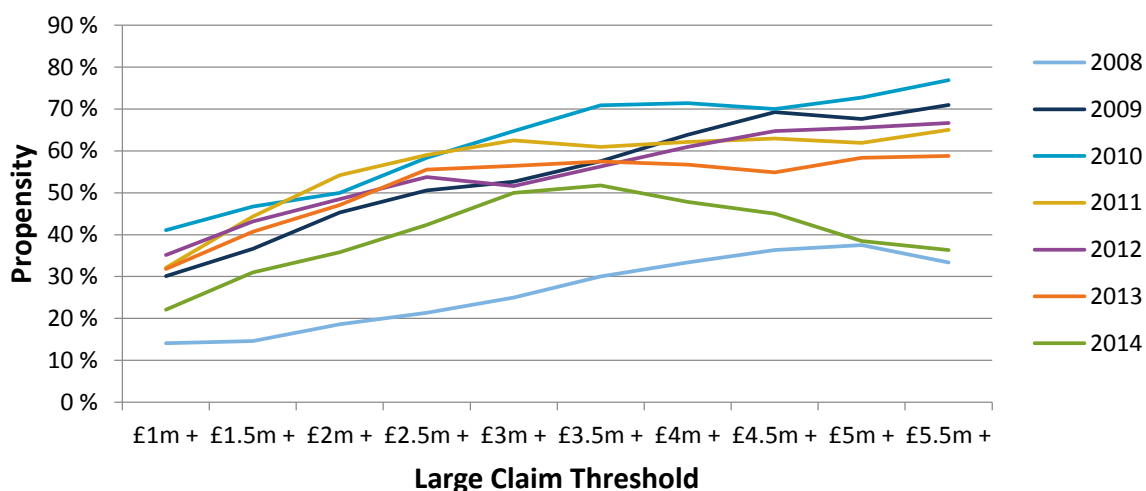
Figure 2.9(a): Motor PPO propensity by large claim thresholds split by settlement year – Cumulative

PPO Propensity By Settlement Year - Cumulative Thresholds
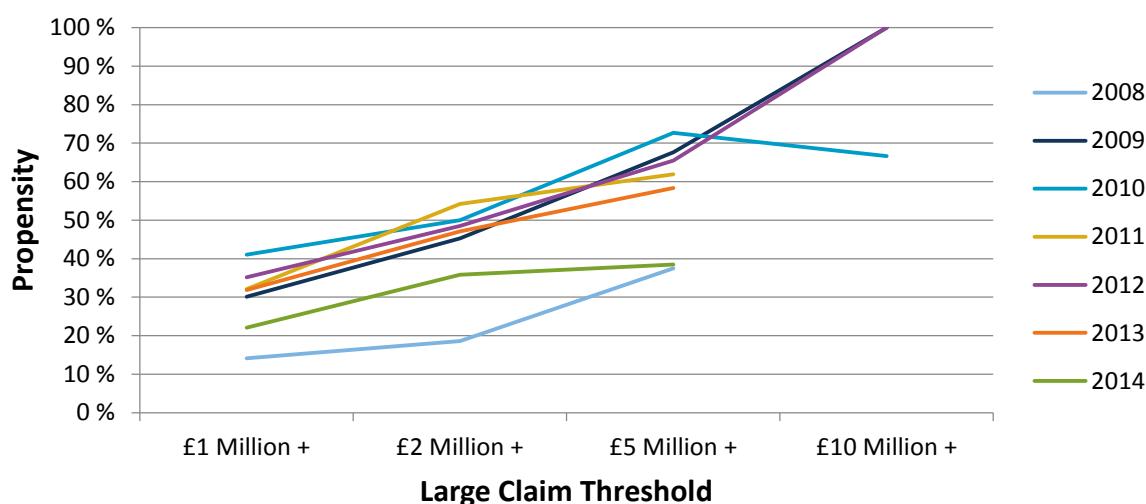

Figure 2.9(b): Motor PPO propensity by large claim thresholds split by settlement year – Cumulative

Motor PPO Propensity by individual insurer

There is significant variation in the PPO propensity experienced by different insurers. The following graph indicates the distribution of Motor PPO propensities across insurers in the survey. It excludes

insurers which have settled fewer than 25 Motor large claims or PPOs in the last 5 years, and only includes PPOs and large claims settled since 2008.
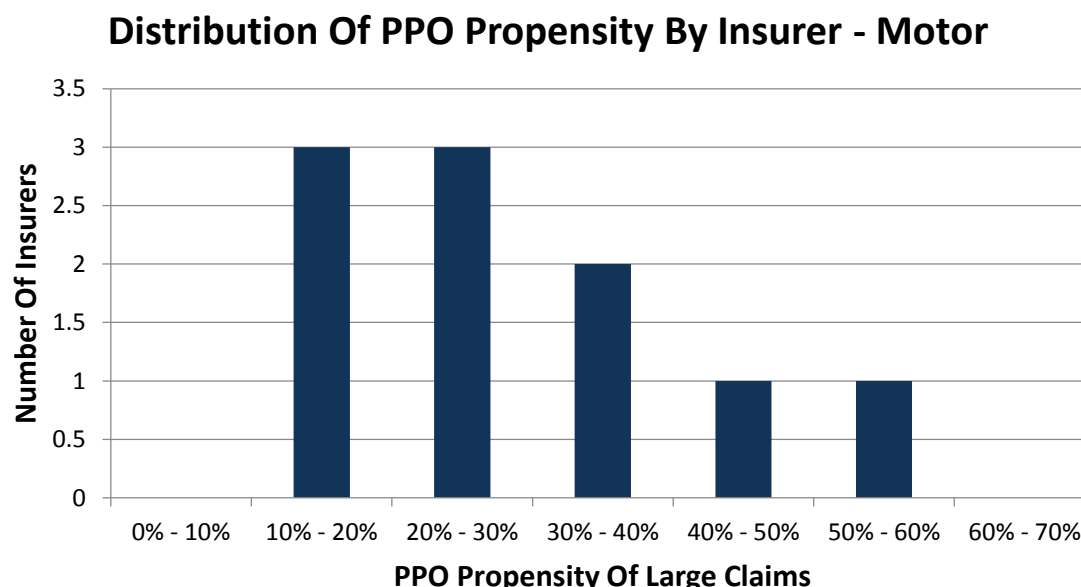
Distribution Of PPO Propensity By Insurer - Motor

Figure 2.10: Distribution of Motor PPO propensity for insurers who have settled at least 25 large claims (including PPOs) since 2008

The variability in the propensity may be at least partially due to the definition of large claims used by each provider. However we are not surprised to see a variation in propensity between insurers, for example, as a result of differences in the policyholder (and hence claimant) profile arising from the mix of business, as well as due to different attitudes towards settling claims as PPOs by various insurers.

There has been a reduction in PPO propensity seen across the contributors with the biggest motor insurance books from between 1% and 6%. This suggests that the overall 2014 reduction in PPO propensity is not driven by the experience of just one company but is being experienced by a numberof the larger companies.

Triangles of Propensity Rates

We also have the data to enable us to look at triangles of propensity rates which take into account accident period as well as settlement period. These cumulative figures can be seen in Figures 2.11 to 2.13 below (and incremental figures are shown in Figures 2.14 to 2.16). We have only collected data on large claims settled since 2008, so the cumulative triangles the cells shaded in blue are incomplete and as such should be treated with caution. We have combined accident years prior to 2001; the oldest accident year to be included is 1997, for which the development is incomplete.

Accident Year	Settlement Year 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 and Prior									40	73	89	105	120	121	125
2001								18	27	31	36	41	47	47	
2002							26	44	59	71	73	81	83		
2003						20	41	58	77	85	93	96			
2004					10	35	51	68	76	88	93				
2005				7	17	31	55	70	80	88					
2006			3	8	18	32	58	76	91						
2007		1	4	6	19	40	70	94							
2008	0	0	2	8	22	31	57								
2009	3	4	4	11	31	55									
2010	0	0	0	5	20										
2011	0	0	2	10											
2012	0	2	6												
2013	0	1													
2014	0														

Figure 2.11: Triangle showing cumulative development of Non MIB non-PPO large claim numbers

Accident Year	Settlement Year 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 and Prior	0	0	0	0	0	3	6	9	15	26	40	48	53	56	57
2001	0	0	0	0	0	1	2	5	8	9	10	11	11	12	
2002	0	0	0	0	2	2	5	13	16	18	22	25	28		
2003	0	0	0	1	1	4	13	19	23	28	30	31			
2004	0	0	0	0	4	17	29	35	43	44	44				
2005	0	0	1	3	10	24	35	42	45	48					
2006	0	0	1	6	20	28	40	49	50						
2007	0	0	0	4	19	25	35	42							
2008	0	0	3	9	24	35	42								
2009	0	0	2	9	24	33									
2010	0	0	1	6	11										
2011	0	0	1	3											
2012	0	0	2												
2013	0	0													
2014	0														

Figure 2.12: Triangle showing cumulative development of Non MIB PPO claim numbers

Accident Year	Settlement Year 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 and Prior									27%	26%	31%	31%	31%	32%	31%
2001								22%	23%	23%	22%	21%	19%	20%	
2002							16%	23%	21%	20%	23%	24%	25%		
2003						17%	24%	25%	23%	25%	24%	24%			
2004					29%	33%	36%	34%	36%	33%	32%				
2005				30%	37%	44%	39%	38%	36%	35%					
2006			25%	43%	53%	47%	41%	39%	35%						
2007		0%	0%	40%	50%	38%	33%	31%							
2008	0%	0%	60%	53%	52%	53%	42%								
2009	0%	0%	33%	45%	44%	38%									
2010	0%	0%	100%	55%	35%										
2011	0%	0%	33%	23%											
2012	0%	0%	25%												
2013	0%	0%													
2014	0%														

Figure 2.13: Triangle showing cumulative development of Non MIB propensity rates

Accident Year	Settlement Year 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 and Prior									40	33	16	16	15	1	4
2001								18	9	4	5	5	6	0	
2002							26	18	15	12	2	8	2		
2003						20	21	17	19	8	8	3			
2004					10	25	16	17	8	12	5				
2005				7	10	14	24	15	10	8					
2006			3	5	10	14	26	18	15						
2007		1	3	2	13	21	30	24							
2008	0	0	2	6	14	9	26								
2009	3	1	0	7	20	24									
2010	0	0	0	5	15										
2011	0	0	2	8											
2012	0	2	4												
2013	0	1													
2014	0														

Figure 2.14: Triangle showing incremental development of Non MIB non-PPO large claims

Accident Year	Settlement Year 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 and Prior	0	0	0	0	0	3	3	3	6	11	14	8	5	3	1
2001	0	0	0	0	0	1	1	3	3	1	1	1	0	1	
2002	0	0	0	0	2	0	3	8	3	2	4	3	3		
2003	0	0	0	1	0	3	9	6	4	5	2	1			
2004	0	0	0	0	4	13	12	6	8	1	0				
2005	0	0	1	2	7	14	11	7	3	3					
2006	0	0	1	5	14	8	12	9	1						
2007	0	0	0	4	15	6	10	7							
2008	0	0	3	6	15	11	7								
2009	0	0	2	7	15	9									
2010	0	0	1	5	5										
2011	0	0	1	2											
2012	0	0	2												
2013	0	0													
2014	0														

Figure 2.15: Triangle showing incremental development of Non MIB PPO large claims

Accident Year	Settlement Year 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 and Prior									13%	25%	47%	33%	25%	75%	20%
2001								14%	25%	20%	17%	17%	0%	1	
2002							10%	31%	17%	14%	67%	27%	60%		
2003						13%	30%	26%	17%	38%	20%	25%			
2004					29%	34%	43%	26%	50%	8%	0%				
2005				22%	41%	50%	31%	32%	23%	27%					
2006			25%	50%	58%	36%	32%	33%	6%						
2007		0%	0%	67%	54%	22%	25%	23%							
2008	0%	0%	60%	50%	52%	55%	21%								
2009	0%	0%	100%	50%	43%	27%									
2010	0%	0%	100%	50%	25%										
2011	0%	0%	33%	20%											
2012	0%	0%	33%												
2013	0%	0%													
2014	0%														

Figure 2.16: Triangle showing Non MIB propensity rates by accident year and settlement period

Motor PPO Propensity – as proportion of exposure

Figure 2.17 below uses a different method to measure PPO propensity. This method looks at the number of PPOs as a proportion of earned premium. We have taken the number of PPOs settled in a given year divided by an average earned premium based on the premium earned over a 6 year period starting 7 years earlier (i.e. the number of PPOs settled in 2012 is divided by the average annual amount of gross premium earned during the period 2006 to 2011). These PPO propensity figures include all PPOs and not just those over £1 million, and are in terms of the number of PPOs per £1,000 million of gross earned premium. The slight drop in gross earned premium from settlement year 2010 levels corresponds with a drop in the earned premium from accident year 2005 onwards that we see in the underlying data.
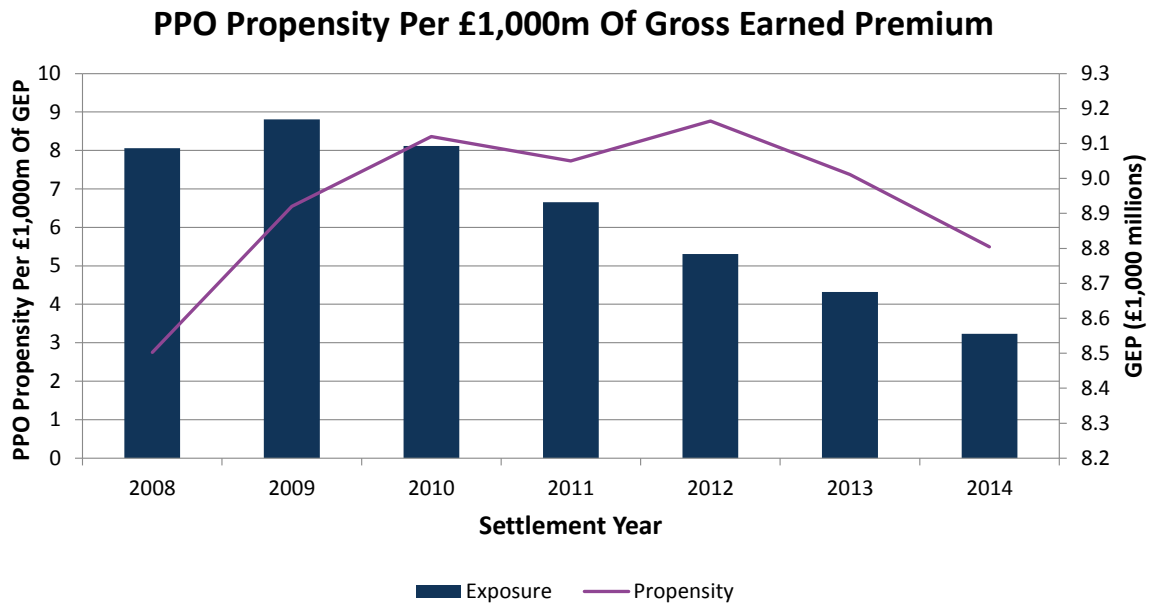
## PPO Propensity Per £1,000m Of Gross Earned Premium

Figure 2.17: Propensity of PPOs measured as a proportion of gross earned premium

Figure 2.18 below shows the PPO propensity as a proportion of average earned vehicle years. The definition of average exposure is the same as that for earned premiums above. The graph shows the total number of PPOs (not just those over £1million) per million earned vehicle years. The drop in earned vehicle years from settlement year 2011 levels corresponds with a drop in the earned vehicle years from accident year 2006 onwards that we see in the underlying data.

PPO Propensity Per Million Earned Vehicle Years
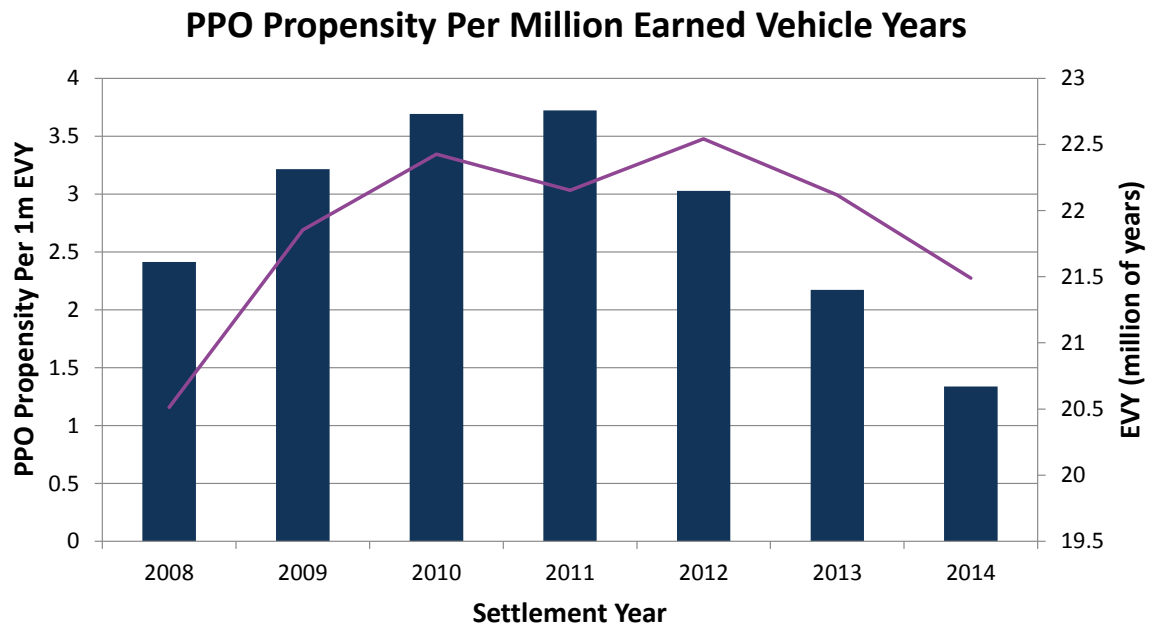
Figure 2.18: Propensity of PPOs as a proportion of earned vehicle years

Motor PPO Propensity – Commercial vs Private Motor

Figure 2.19 below looks at the cumulative PPO propensity of Motor claims at different thresholds, split by private and commercial vehicles. It only considers settlement years from 2008 onwards. We can see that the commercial PPO propensity appears to be greater for claim sizes below £3 million.

After this point the PPO propensity is broadly the same for both private and commercial PPOs. However it is worth noting that due to the lack of large claims at high thresholds the results are more volatile.

Private/Commercial Propensity By Large Claim Threshold
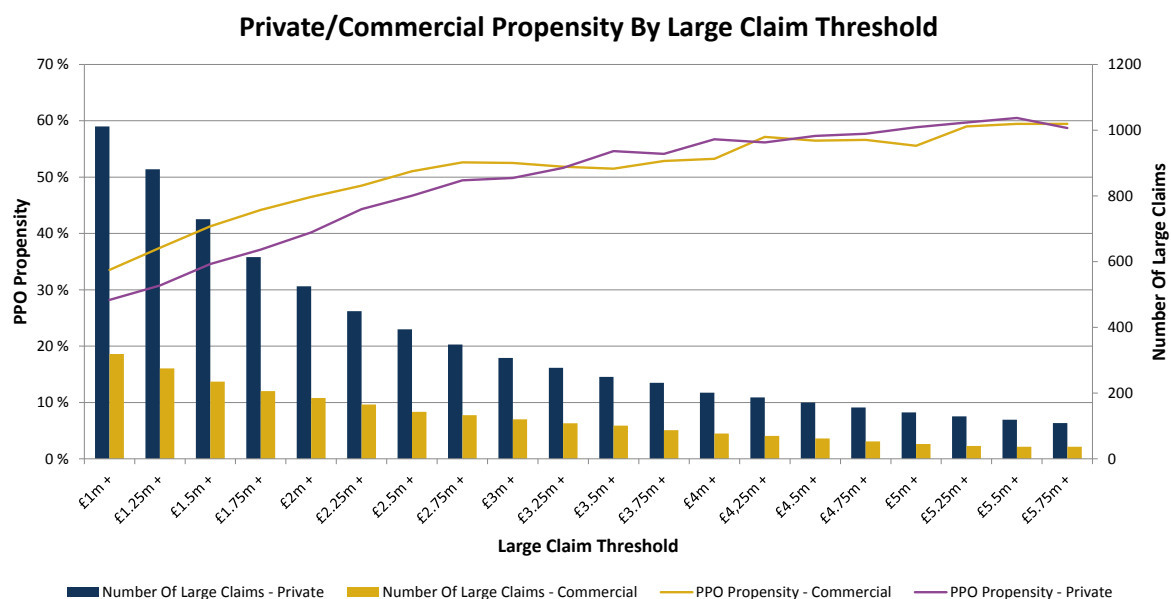
Figure 2.19: PPO propensity for private and commercial Motor by large claims threshold

When looking at the propensity by settlement year in Figure 2.20, the PPO propensity for commercial Motor is much greater in settlement years 2009, 2010, 2013 and 2014.

Private/Commercial Propensity By Settlement Year
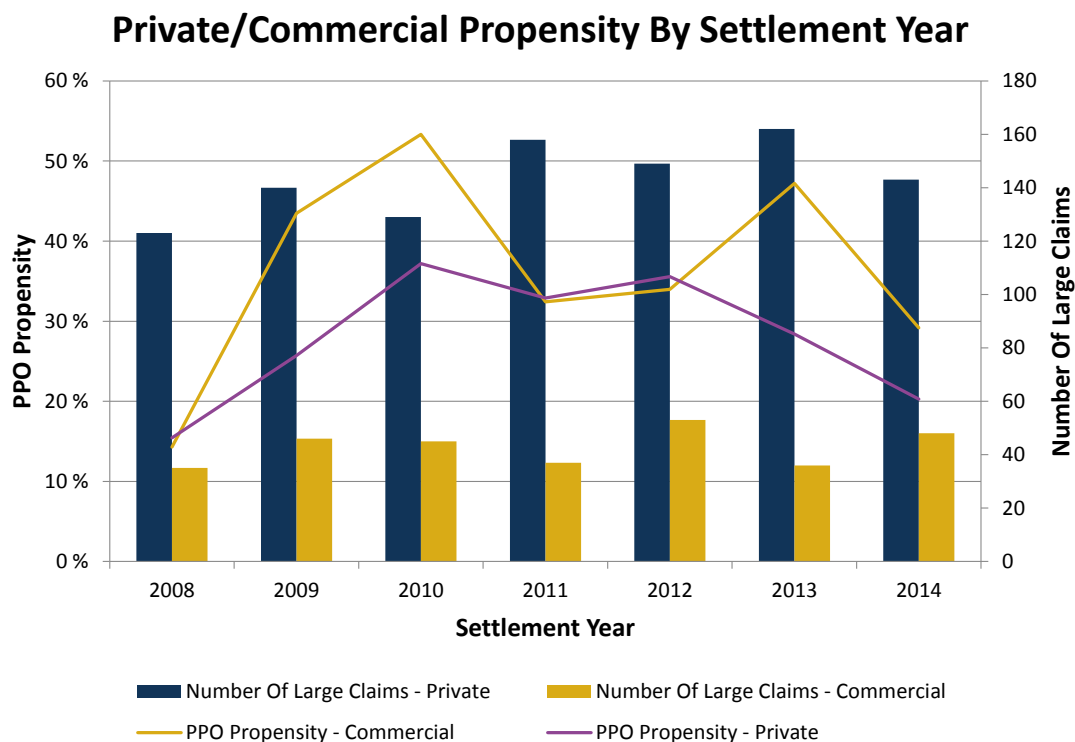
Figure 2.20: PPO propensity for private and commercial Motor by settlement year

2.3   Liability PPO Propensity

Figure 2.21 below shows Liability PPO propensity as a proportion of large claims (greater than £1 million in 2011 terms, indexed at 7% per annum). The exposure count shown in the graph includes PPOs with a value above £1million (indexed in the same way as the large claims).

The PPO propensity for Liability claims appears to still be significantly lower than that for Motor PPOs. The small number of Liability claims that have settled in each year is likely to have contributed to the volatility in experience. In particular, there was only one Liability PPO (above £1million indexed) that settled in 2008.
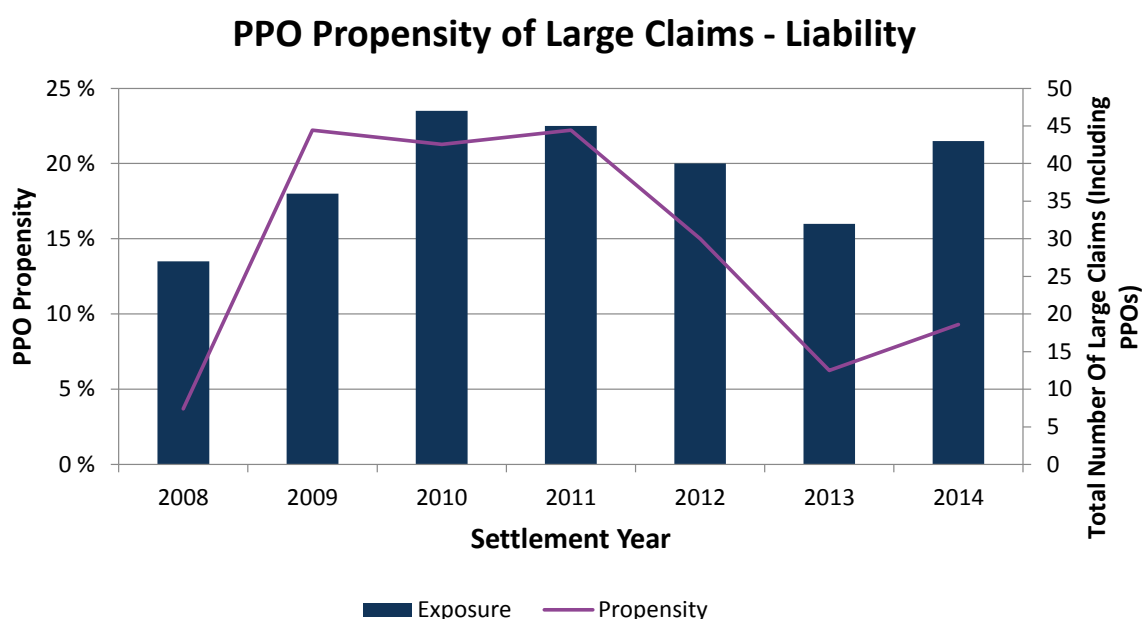
Figure 2.21: Proportion of Liability large claims that settle as a PPO, by settlement year

Liability PPO Propensity by claim size – incremental thresholds

Figure 2.22 below shows the PPO propensity for Liability PPOs by large claim threshold. As in the Motor PPO propensity section, the threshold definitions are defined in monetary terms and indexed back at 7% per settlement year. The PPO values have been derived using a real discount rate of 2.5%. Figures 2.22 and 2.23 only represent claims settled since the beginning of 2009.

Figure 2.22 shows that PPO propensity increases with the large claims threshold band until claims reach £4-5 million. However, there are only five Liability PPOs greater than £5 million; so the results will be volatile.

PPO Propensity At Different Large Claim Thresholds - Incremental Thresholds
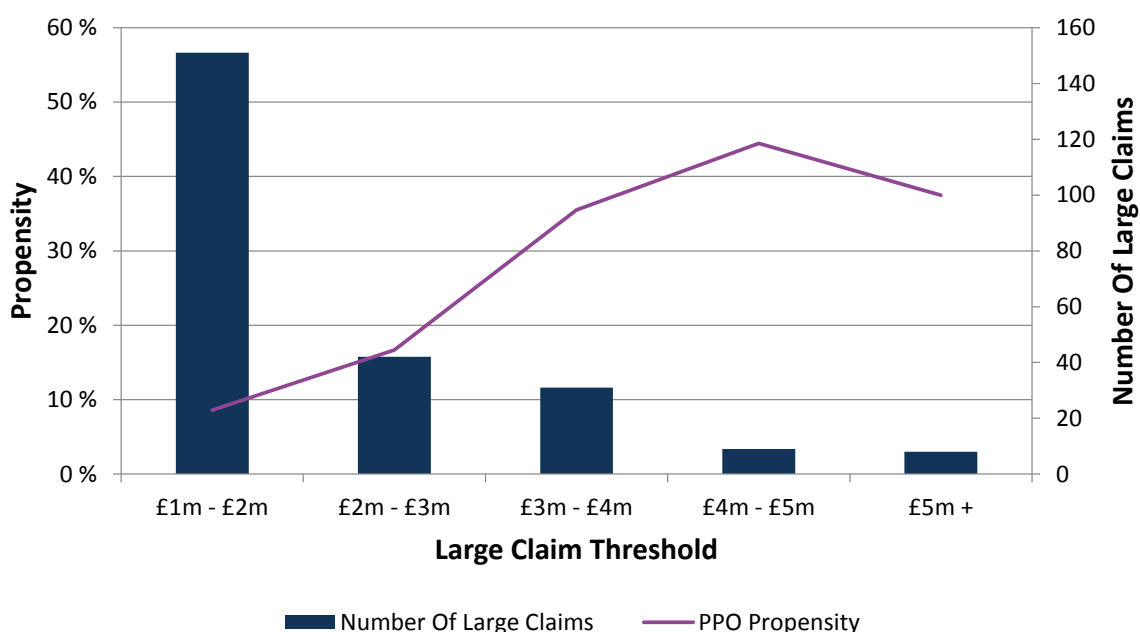
Figure 2.22: Liability PPO propensity by large claim threshold bands (settled since 2009 only)

Liability PPO Propensity by claim size – cumulative thresholds

Figure 2.23 below shows the cumulative PPO propensity by large claim threshold. Unlike for Motor, after a threshold of £4 million, it appears as though propensity decreases as the threshold increases.

PPO Propensity At Different Large Claim Thresholds - Cumulative Thresholds
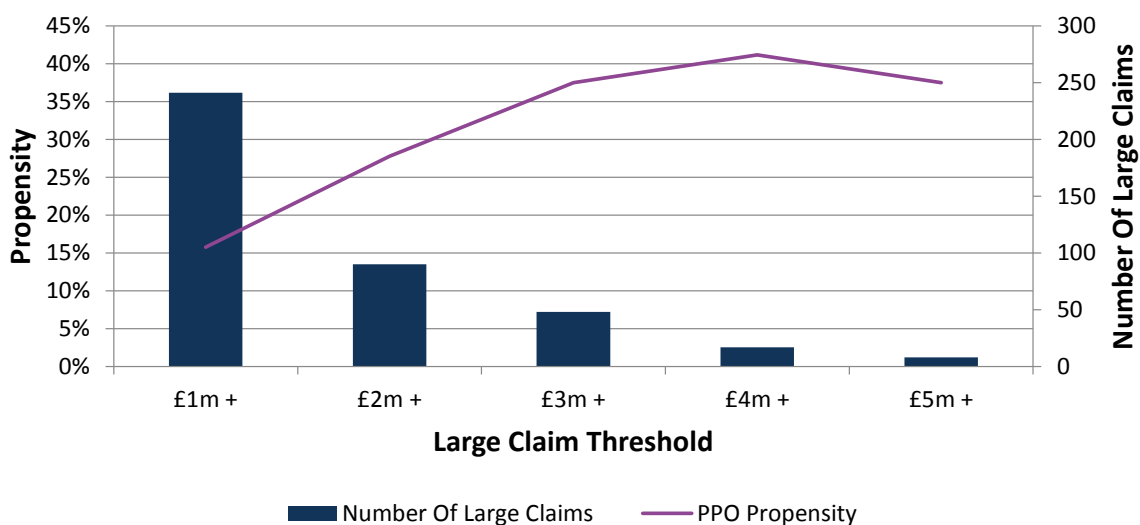
Figure 2.23: Liability PPO propensity by cumulative large claim threshold (settled since 2009 only)

Liability claims are more likely to come from policies that have a limit on the cover provided, as opposed to Motor claims falling under unlimited motor bodily injury cover. As a result, larger Liability claims may be less likely to settle as PPOs, which may explain the trend seen above in Figures 2.22 and 2.23 of a lower PPO propensity for the largest Liability claims. However, the small amount of data makes it difficult to support this conclusion, and the drop may simply be as a result of volatility.

Liability PPO Propensity – as proportion of exposure

Figure 2.24 below shows the propensity of Liability PPOs as a measure of gross earned premium. The definition of gross earned premium is the same as that for Motor PPOs. These PPO propensity figures include all PPOs and not just those over £1million, and are in terms of the number of PPOs per £1,000 million of gross earned premium.
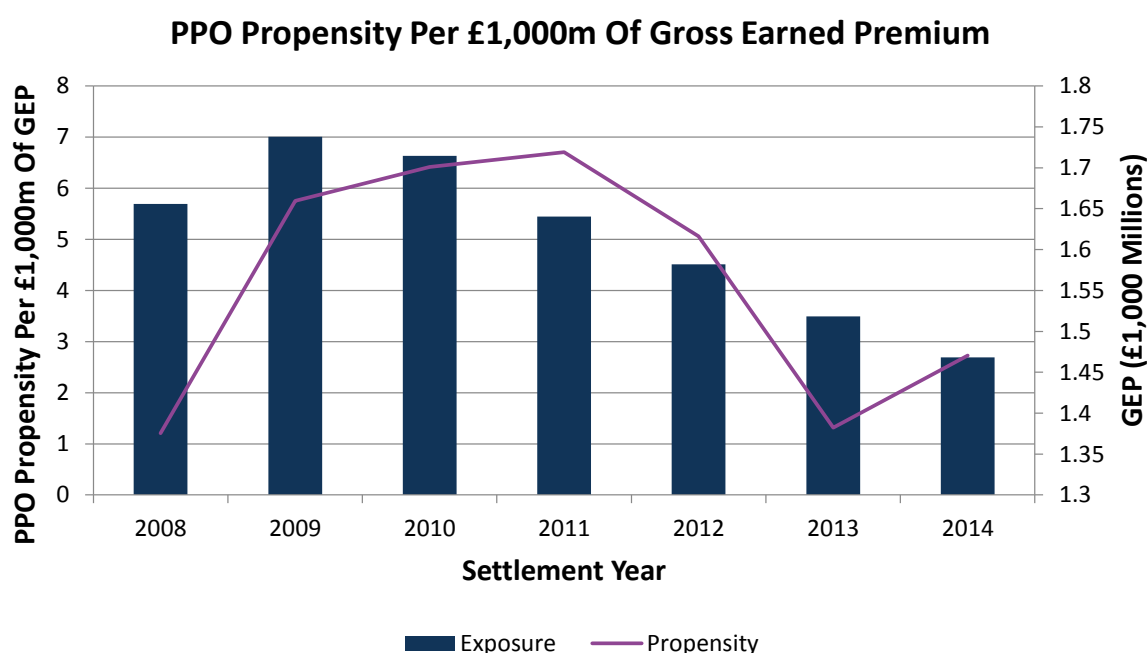
Figure 2.24: Propensity of Liability PPOs by gross earned premium

3 Motor PPOs – General Characteristics

3.1 Cover Type

The pie chart on the left in Figure 3.1 shows the proportion of Motor PPOs split by cover type, and the one on the right shows the split of cover type based on premium data supplied by the contributors. They show that in total (over all insurers), the proportion of PPOs for private car cover broadly corresponds to the proportion of premium that the cover makes up.
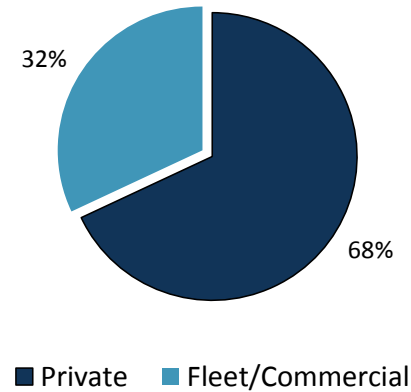
Split Of Motor PPOs by Cover Type

10%
19%
71%

■ Private ■ Commercial ■ Fleet

Premium Split

32%
68%

■ Private ■ Fleet/Commercial
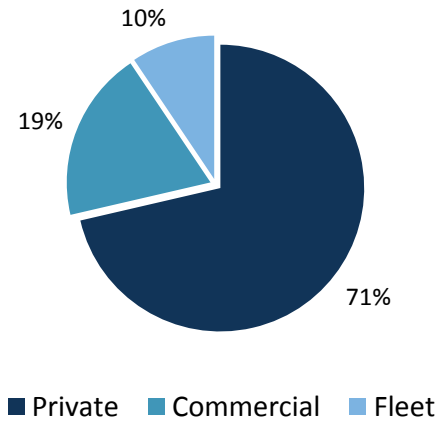
Figure 3.1: Commercial/ Private Split of Motor PPOs and Motor Premiums

Similarly, the three charts in Figure 3.2 compare the proportion of PPOs from comprehensive and non-comprehensive private Motor policies against the proportion of premiums written and the proportion of vehicle years exposed. Compared to premiums, non-comprehensive policies give rise to a disproportionate number of PPO claims, as would be expected given comprehensive premiums include cover for own damage claims. However, when we look at the split by vehicle years, the disproportionate number of PPOs for non-comprehensive policies is still prevalent.

Split of Private Motor PPOs

23%
77%

■ Comp ■ Non Comp

Premium Split

7%
93%
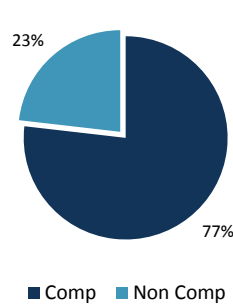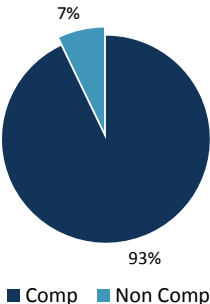
■ Comp ■ Non Comp
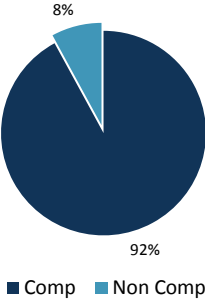
Vehicle Year Split

8%
92%

■ Comp ■ Non Comp

Figure 3.2: Comprehensive/ Non-Comprehensive Split of Motor PPOs, Motor Premiums and Motor Vehicle Years

3.2   Indexation Measures

The index used to inflate annual payments was originally automatically linked to the Retail Prices Index (RPI). However, in 2006, a court case was brought in the form of Thompstone vs Tameside and Glossop Acute Services NHS Trust which challenged this assumption and suggested that the payments for future cost of care would be better linked to wage inflation. The court agreed and the annual inflation increase was linked to the Annual Survey of Hours and Earnings (ASHE). The case was appealed and a number of other cases were put on hold pending the outcome. In January 2008, the Court of Appeal upheld the ruling that a different index other than RPI can be chosen if thought more appropriate ([2008] EWCA Civ 5). Since then the majority of PPOs have had inflation linked to ASHE as is shown in Figure 3.3 below.

There were further legal decisions in 2008 that contributed to the final definition of the model order. In July Justice McKay confirmed the model for the wording of the Periodic Payment Orders ([2008] EWHC 2423 (QB)). In December Justice Holland confirmed the approach of the previous judgements ([2008] EWHC 2948 (QB)). Exactly what was the trigger for an increase in the PPO numbers is a matter for debate and we are unlikely to ever know the answer. It is worth noting that the number of PPOs settling in the fourth quarter of 2008 is roughly in line with early 2009. An alternative argument is that in early 2009, there were a large number of prominent lawyers giving lectures on the subject, and the increased awareness as a result of this may have been the trigger for the increased PPO numbers.

PPOs can have different elements included within the regular stream of payments, for example they can include both a loss of earnings and a cost of care head of damage. These can be linked to different indices, so Figure 3.3 below just shows the index for the primary head of damage PPO payment, where the primary head of damage has been defined as the one for which the associated PPO amount is the largest.
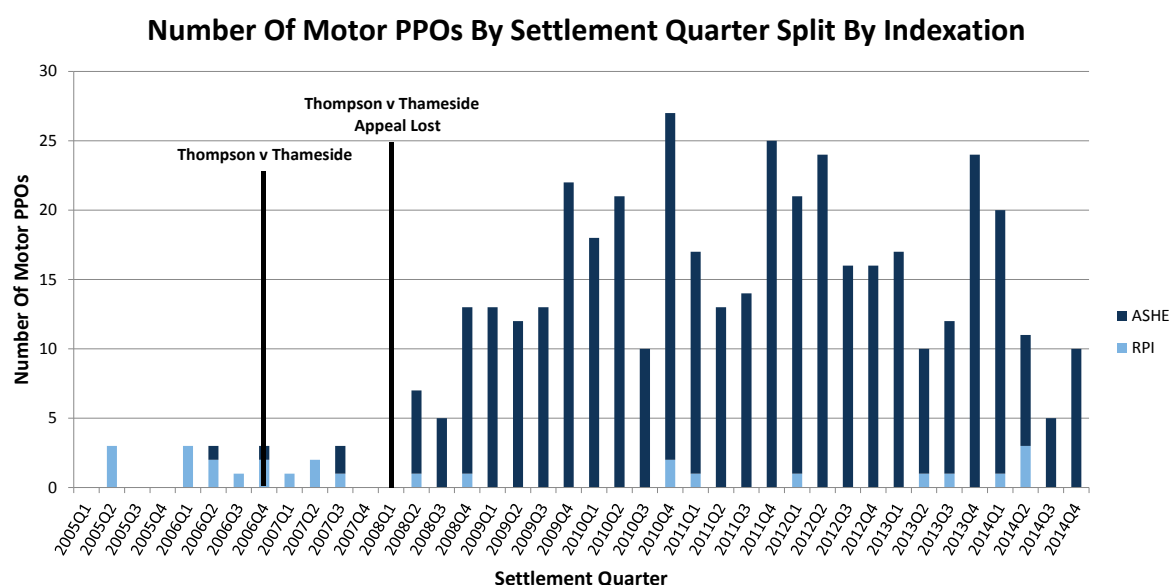

Figure 3.3: Number of Motor PPOs settled in each quarter split by index used for initial PPO for each claim

ASHE is produced by the Office of National Statistics (ONS) every November, based on data as at April. It covers a wide range of occupations, though the vast majority of PPOs so far have, in respect of care costs, been linked to sub-category 6115, relating to care assistants and home carers.

Within a particular job category, the ASHE earnings inflation measures are further split into percentiles. A PPO will have the annual inflation linked to a specific percentile, for example to those whose earnings are in the top 10% of earners in the category (i.e. the 90th percentile).

Implemented in the 2011 survey, ASHE code 6115 (Care assistants and home carers) has been split into two new codes; 6145 (Care workers and home carers) and 6146 (Senior care workers). Even though the ONS have stated that they will continue to publish 6115, albeit separately to the main tables, 'for the foreseeable future', there is an additional complication since the basis of the ASHE 6115 figures has changed, and so a slight adjustment is required to be made to the figures for 2011 onwards (details are available within the ONS download of ASHE Table 26 which corresponds to SOC 6145 and 6146). Within the survey, no PPOs have yet been settled that are recorded as being linked to one of the new ASHE codes.

Table 3.1 below shows the breakdown of all Motor PPO payments in the survey, by head of damage and indices. Note there are 469 Motor PPO payment streams (corresponding to 442 Motor PPOs, 25 of which have a second head of damage and 2 that have a third head of damage).

Total Heads Of Damage	ASHE 6115	Not Indexed	RPI	ASHE Other	Total
Care & Case Management	393	2	27	1	423
Loss of Earnings	3	0	7	2	12
Other	0	7	0	0	7
NA/Missing	22	2	3	0	27
Total	418	11	37	3	469

Table 3.1: Index linked to each head of damage for Motor PPOs

It can be seen in Figure 3.4 that there has been an increase in the use of the 80th percentile over time, which in the 2014 settlement year accounted for over 90% of Motor PPOs; up from just under 30% in 2008. This appears to be primarily at the expense of the 75th percentile which was the most popular in 2008.
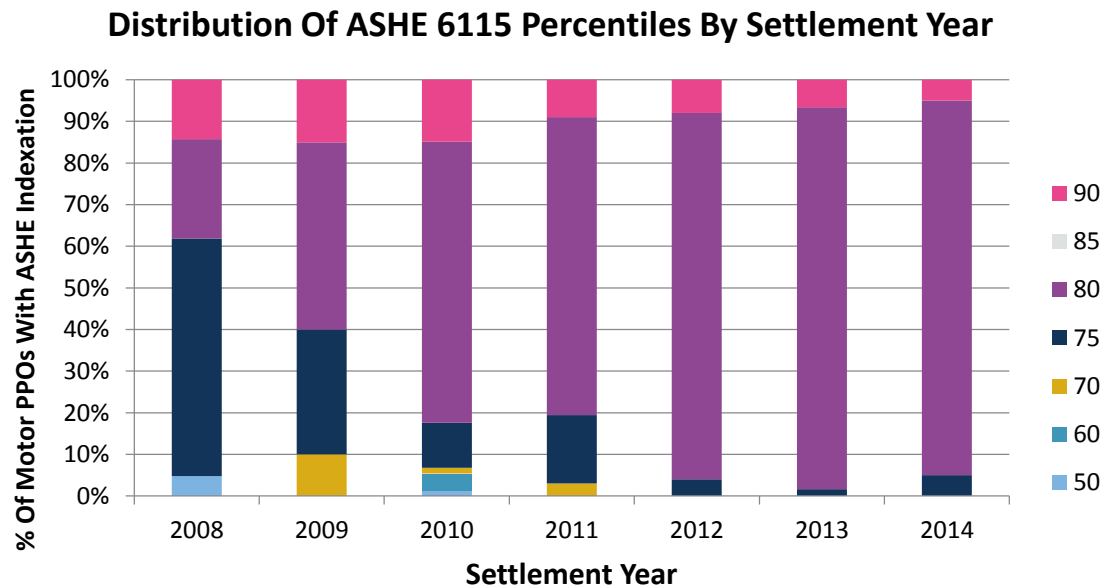
Distribution Of ASHE 6115 Percentiles By Settlement Year

Figure 3.4: Distribution of ASHE 6115 Percentiles used for Motor PPOs primary Head of Damage by Settlement Year

3.3 Claimant and Driver Details

Figure 3.5 shows the number of PPOs by age and gender of driver at the time of the accident. The profile of driver age for males is similar to the claim frequency profile by driver age seen across the industry. This is less apparent for females, though this may just be due to the relatively small sample size for females. Please note, these figures are for private and commercial covers combined; the profile is different depending on which cover you are looking at (these differences are shown in Section 5).

Number Of Motor PPOs By Age Of Driver
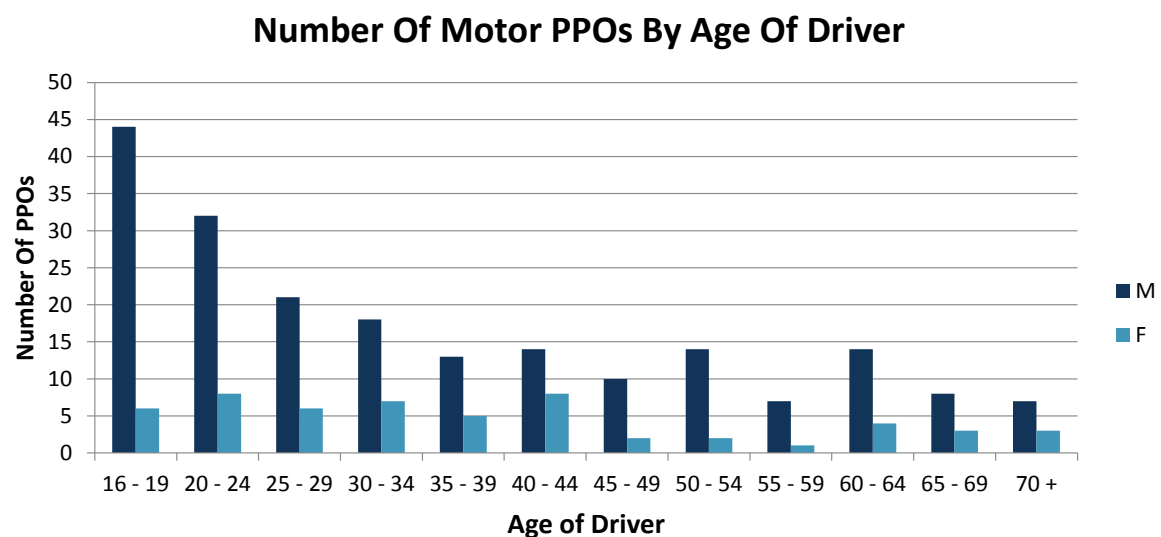
Figure 3.5: Age of Driver at the time of Accident by Gender

Figure 3.5 above shows that most PPO claims involve younger drivers. Figure 3.6 below shows that the modal PPO claimant age for both males and females is between the ages of 15 and 19.

Age Of Claimant At Time Of Accident
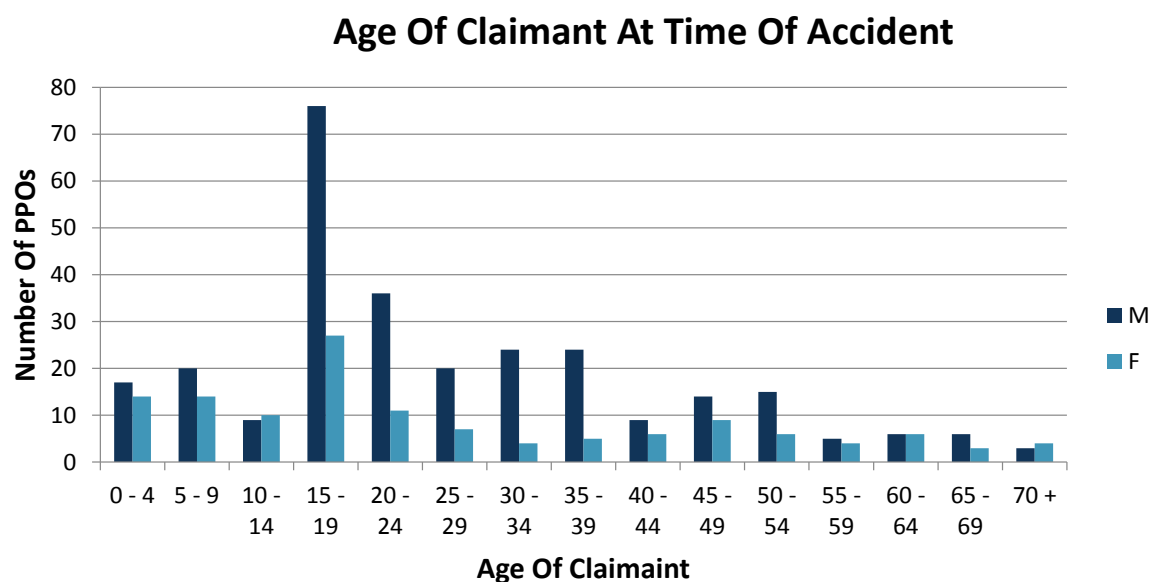
Figure 3.6: Age of Motor PPO Claimant at the time of Accident by Gender

Figure 3.7 below, shows that there is a strong relationship between young drivers and young claimants. In particular the 16-19 driver age bracket has around 70% of PPO claimants under 25. This may be due to a feature of young male drivers tending to drive around with a group of similarly aged friends in the car and being more likely to have a serious accident at speed.

However it is worth noting that claimants between the ages of 15 and 24, where the drivers are also between these ages, only represent 57 (or 13%) of Motor PPO claims in this survey. In the figure below the coloured blocks represent the number of claimants in each age group.
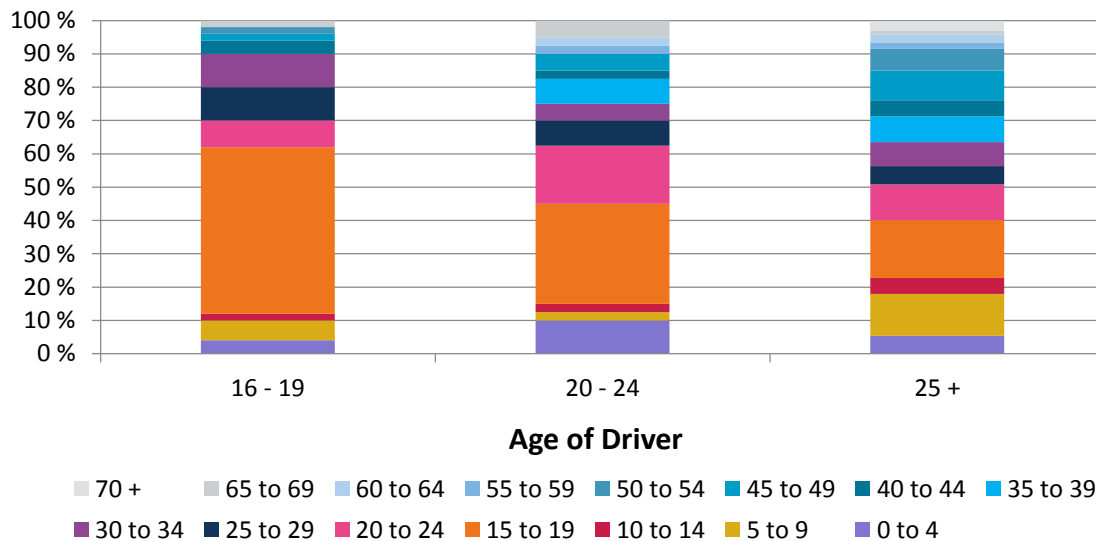
Age Of Driver Against Age Of Claimant At Time Of Accident

Figure 3.7: Age of Motor PPO Claimant at the time of Accident

Delay to Settlement

Figure 3.8 shows the delay in claim settlement from the date of accident. This is calculated as the time elapsed between accident and PPO settlement, rounded to the nearest whole year.

Claimants who are younger at the time of the accident tend to have longer settlement delays (see Figure 3.10); this is likely to be due to the fact that minors are advised to wait until they are at least 18 before seeking to settle their claims, as only then can a fair medical prognosis of their condition be made.

Figure 3.8 below suggests that the distribution of PPOs by delay to settlement appears to be in line with what has been previously seen. The averages for 2012, 2013 and 2014 have been 6.6, 6.2 and 6.4 respectively based on this data set.

Distribution Of Delay To Settlement
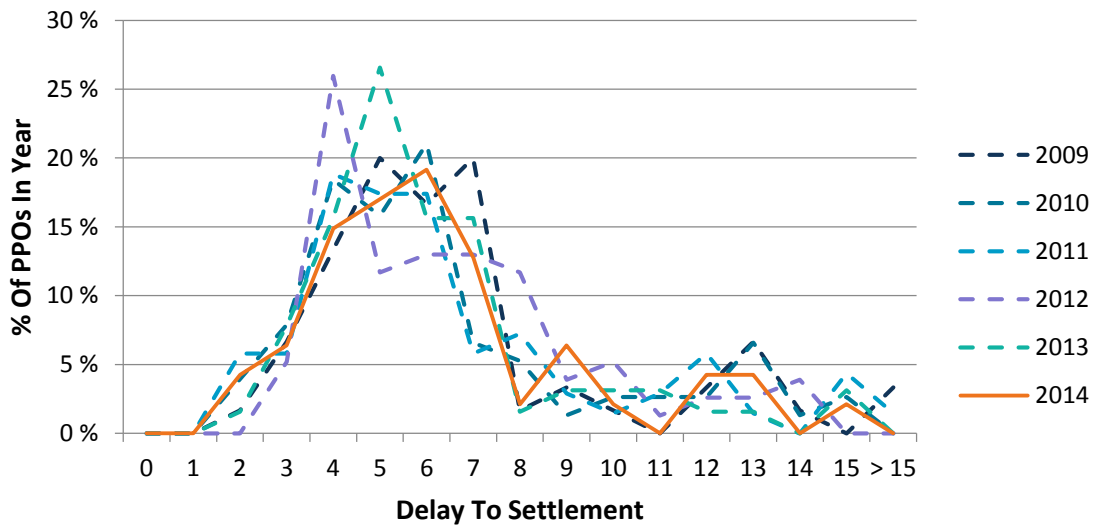
Figure 3.8: Distribution of Delay to Motor PPO Settlement by Settlement Year

The peak in the number of PPOs for claimants aged 20-24 at settlement date seen below in Figure 3.9 corresponds to the peak in number of PPOs for claimants aged 15-19 at age of accident as seen in Figure 3.6.
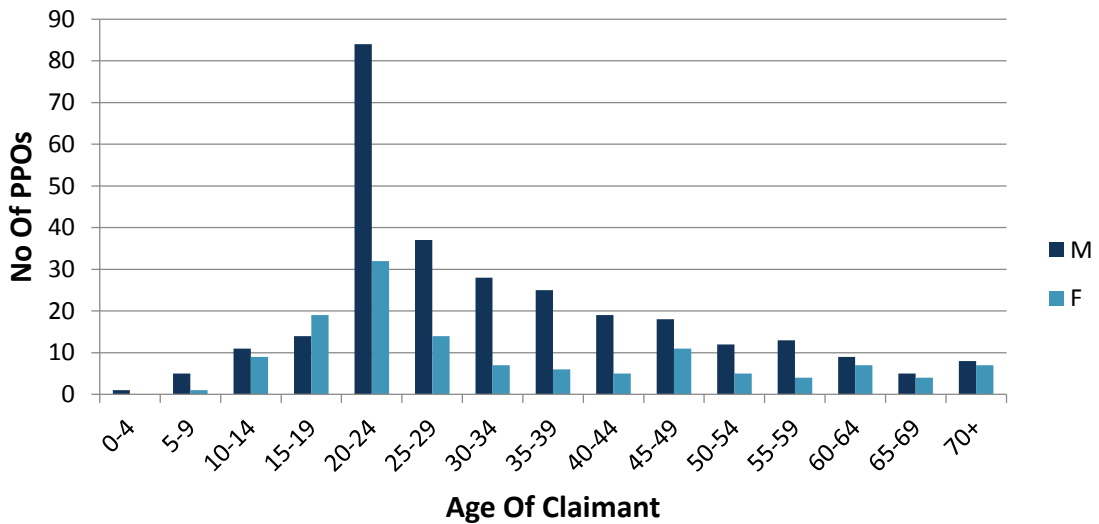
Age Of Claimant At Date Of Settlement

Figure 3.9: Age of Motor PPO Claimant at the time of Settlement by Gender

The below scatter plot in Figure 3.10 shows that longer delays to settlement are more likely for claimants under 18; this is probably due to the effect of minors waiting until the age of maturity for settlement as discussed above.

This is emphasized in Figure 3.11 below which shows the average delay to settlement for each of the claimant age bands.
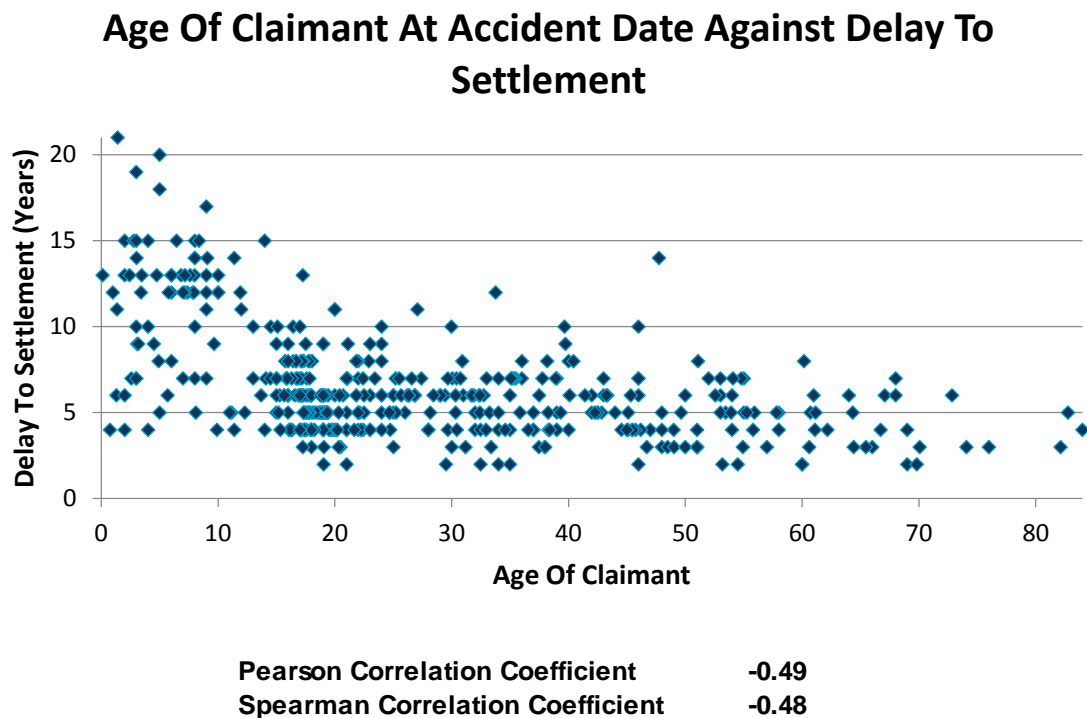
Age Of Claimant At Accident Date Against Delay To Settlement

Pearson Correlation Coefficient	**-0.49**
Spearman Correlation Coefficient	**-0.48**

Figure 3.10: Scatter Graph showing age of Motor PPO claimant at the time of accident against delay to settlement

The coefficients given in these graphs represent the strength and direction of the correlation between the two variables, ranging between -1.00 and +1.00. A larger absolute value represents a stronger relationship in the data, the sign indicating the direction.
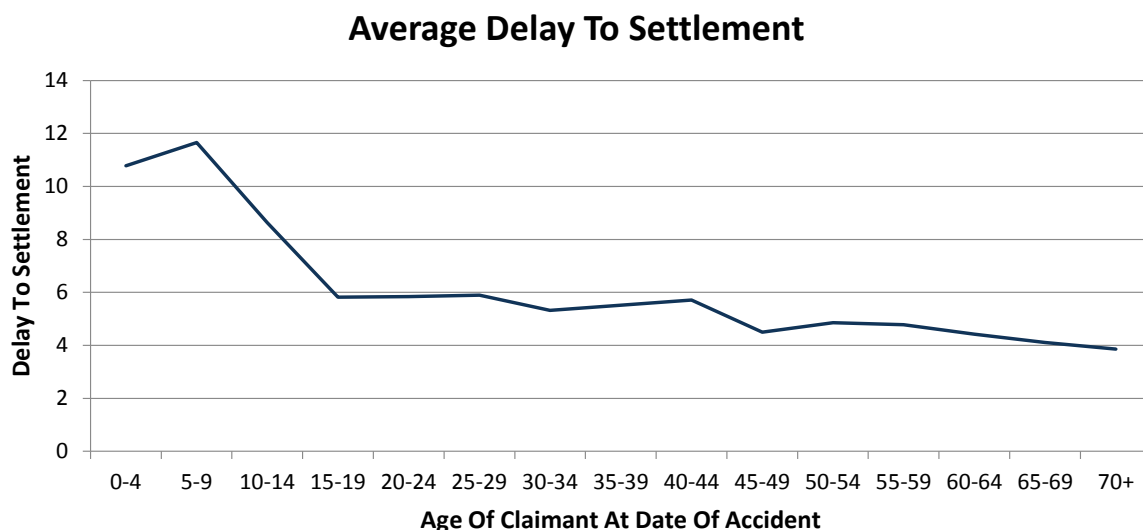
Average Delay To Settlement

Figure 3.11: Average Delay to Settlement by Age of Motor PPO Claimant at Accident date

3.4 Future Life Expectancy

The term 'life expectancy' in this document is defined as the future life expectancy at the time of settlement, as per the survey responses. There is likely to be a wide variation in the practise of determining the future life expectancy in the market, for example, claimant experts' views, defendant experts' views, a mid point in-between and internal views.

Figure 3.12 shows the distribution of life expectancy for the 442 Motor PPOs for which it was provided. An updated version of the ONS tables was produced in 2014 which exhibited weaker mortality than previous mortality tables, this may have caused an increase in the life expectancy of claimants if insurers have adopted this updated version in calculating their life expectancies. The average life expectancy from settlement for Motor PPOs is 45 years.
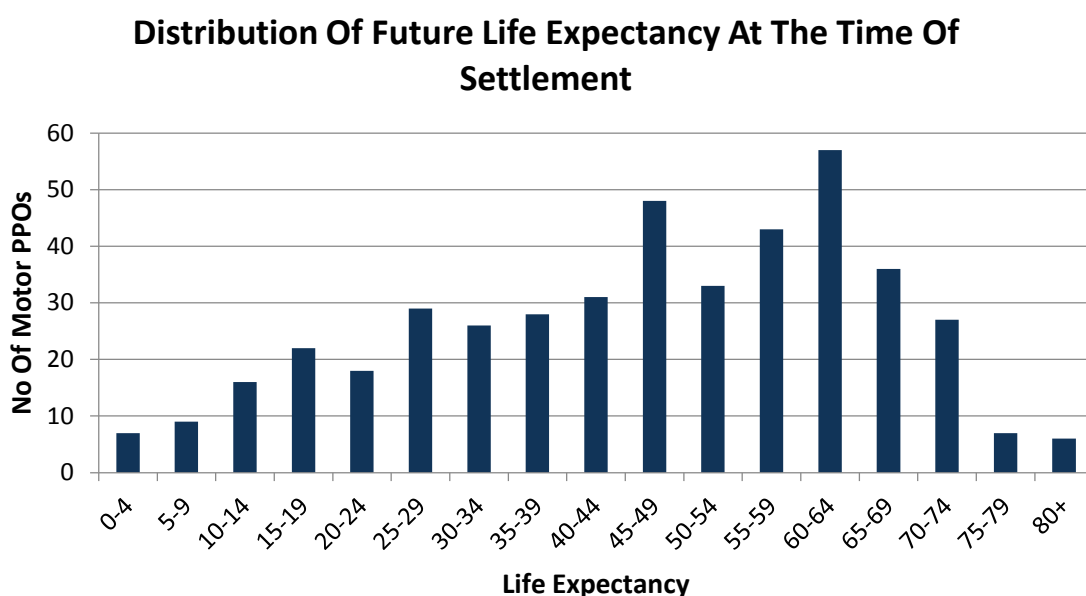
Distribution Of Future Life Expectancy At The Time Of Settlement

Figure 3.12: Distribution of future life expectancy from date of settlement (Motor PPOs only)

It is no surprise that future life expectancy reduces with age of claimant. This can be seen clearly in Figure 3.13 below.
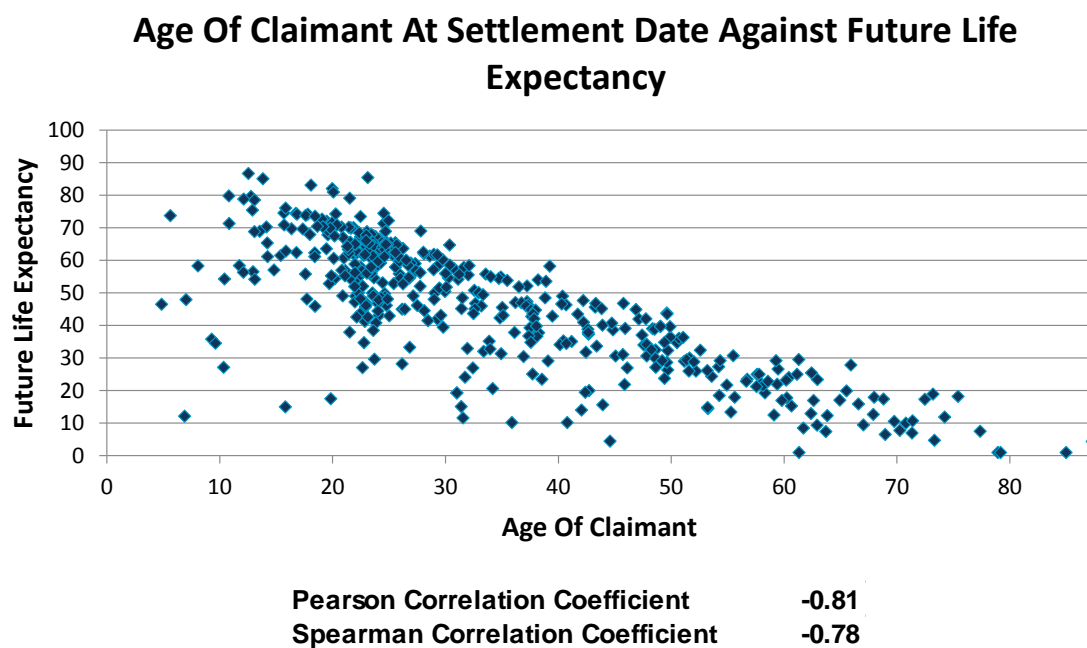
Age Of Claimant At Settlement Date Against Future Life Expectancy

Pearson Correlation Coefficient	**-0.81**
Spearman Correlation Coefficient	**-0.78**

Figure 3.13: Scatter Graph showing age of claimant at date of settlement against future life expectancy from date of settlement (Motor PPOs only)

However there is no discernible correlation between age of claimant and reduction in future life expectancy compared to an unimpaired life. This is illustrated in Figures 3.14 (a) and (b) below.

Percentage reduction in life expectancy is defined as:

$$\frac{Unimpaired\ Life\ Expectancy - Life\ expectancy\ as\ provided\ by\ contributors}{Unimpaired\ Life\ expectancy}$$

Where the unimpaired life expectancy is taken from the 7th edition of the Ogden tables, and all life expectancies are quoted as at date of settlement.

Age Of Claimant At Time Of Settlement Against % Reduction In Life Expectancy
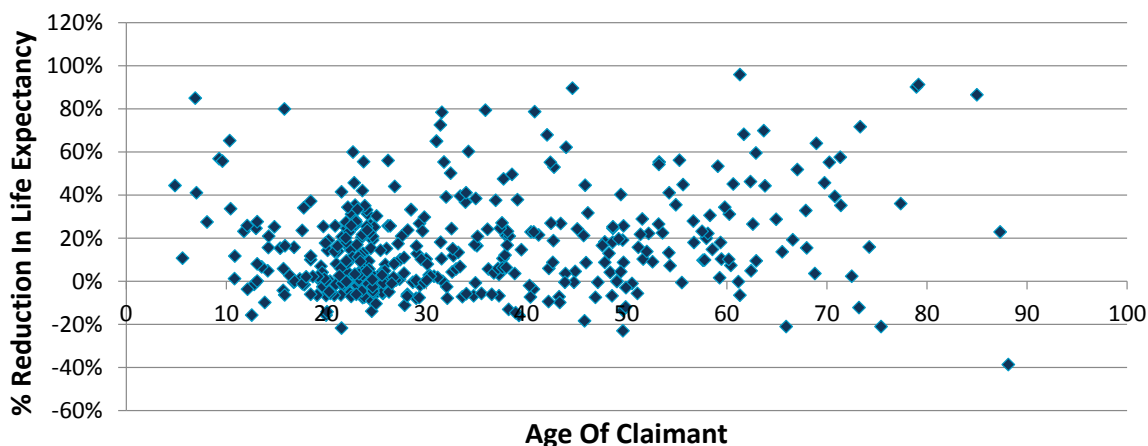
| Pearson Correlation Coefficient | 0.24 |
| Spearman Correlation Coefficient | 0.20 |

Figure 3.14 (a): Scatter Graph showing age of claimant at date of settlement against % reduction in life expectancy (Motor PPOs only)

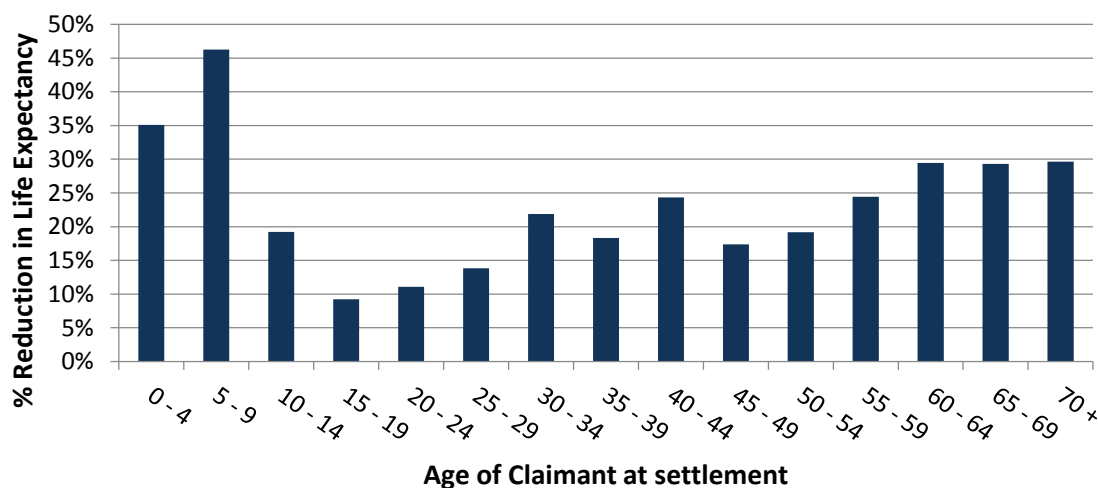## Average Reduction in Life Expectancy by Age of Claimant at Settlement

Figure 3.14 (b): Distribution of age of claimant at date of settlement against % reduction in life expectancy (Motor PPOs only)

Figure 3.14 (a) above shows that although most of the Motor PPOs within the survey assume a reduction in life expectancy, some cases exhibit an assumed increase in life expectancy.

The reasons for these differences are unclear, but possible explanations relate to differences between the unimpaired life expectancy taken from the 7th edition of the Ogden tables and that used by the insurer and the provision of continuous care and monitoring of health for claimants

leading to greater longevity. If more insurers are using more up to date tables with weaker mortality, then this would explain these negative reductions in life expectancy when compared with our unimpaired life expectancy taken from the 7th edition of the Ogden tables.

3.5   Lump Sums and Initial Payments

Figure 3.15 below shows the distribution of the lump sum elements of Motor PPOs in the survey (where the lump sum element excludes the first regular PPO amount). Note that all the lump sum values are in nominal terms. The average lump sum amount for Motor PPOs settling since 2009 is £1.7 million.
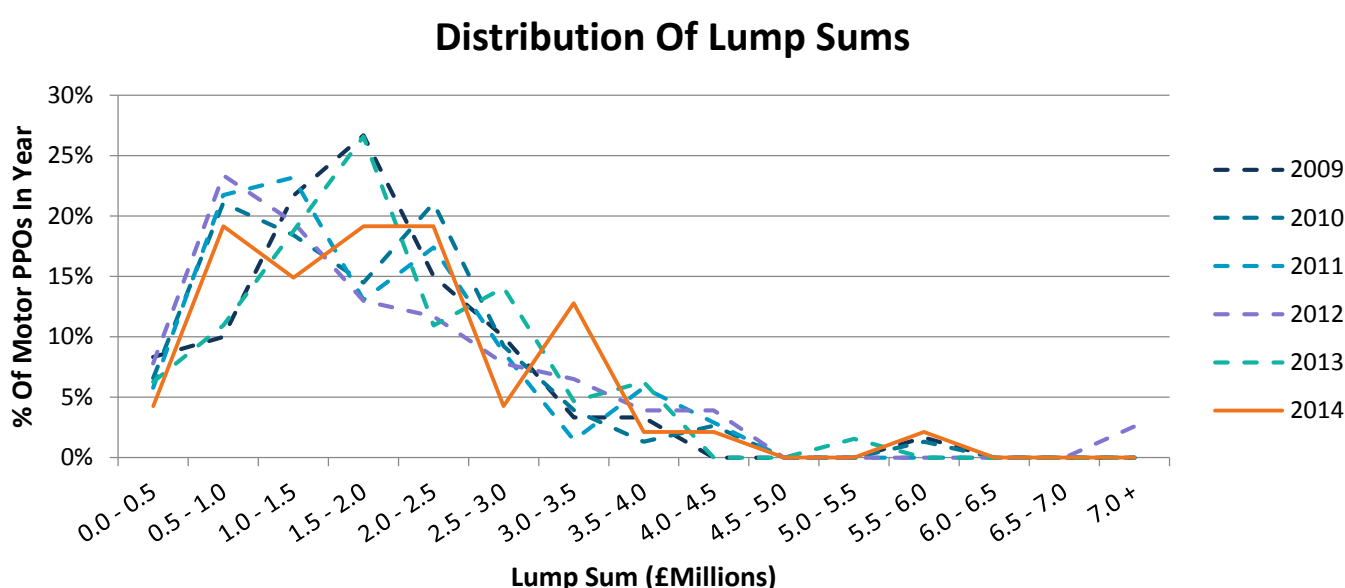
Figure 3.15: Distribution of size of Lump sums associated with a Motor PPO, by settlement year

Figure 3.16 below shows the distribution of the initial regular payment amount of Motor PPOs in the survey at the time of settlement. It should be noted that in cases where one claimant is awarded more than one series of payments (corresponding to different heads of damage) the PPO amount is the sum of the payments for all heads of damage. The un-inflated initial PPO payment has been used which is the size of the annual payments at settlement (before any stepped payments kick in).

These figures have not been indexed and are in nominal terms for simplicity. However, as the inflation measured by the ASHE index has been negligible since 2009 they wouldn't appear much different on an indexed basis.

The average initial PPO amount for Motor PPOs settling since 2009 is £78,000.
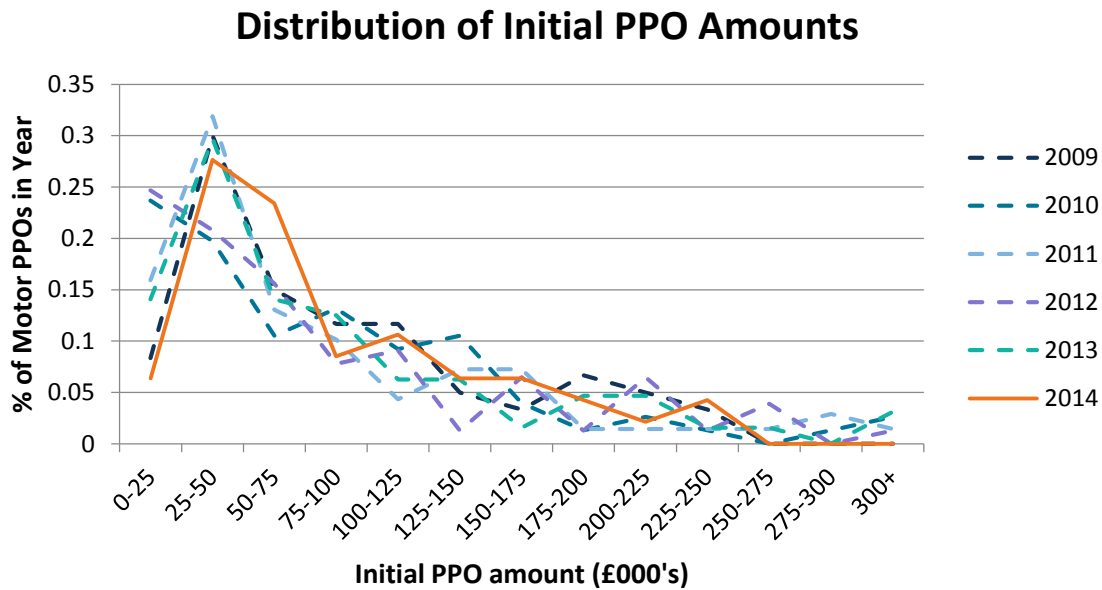
Distribution of Initial PPO Amounts

Figure 3.16: Distribution of size of initial regular Motor PPO payment, split by settlement year

The distributions of PPO amounts and lump sum amounts appear to have followed reasonably consistent distributions over the last 5 years (considering the relatively small sample size). The initial PPO amounts for PPOs awarded in 2014 show a slight shift towards higher initial PPO amounts between 0 and 75,000 – likely driven by inflationary effects.

Unsurprisingly, there is positive correlation between the size of lump sum and the size of the annual PPO amount as demonstrated in Figure 3.17 (which compares the nominal amounts of both).
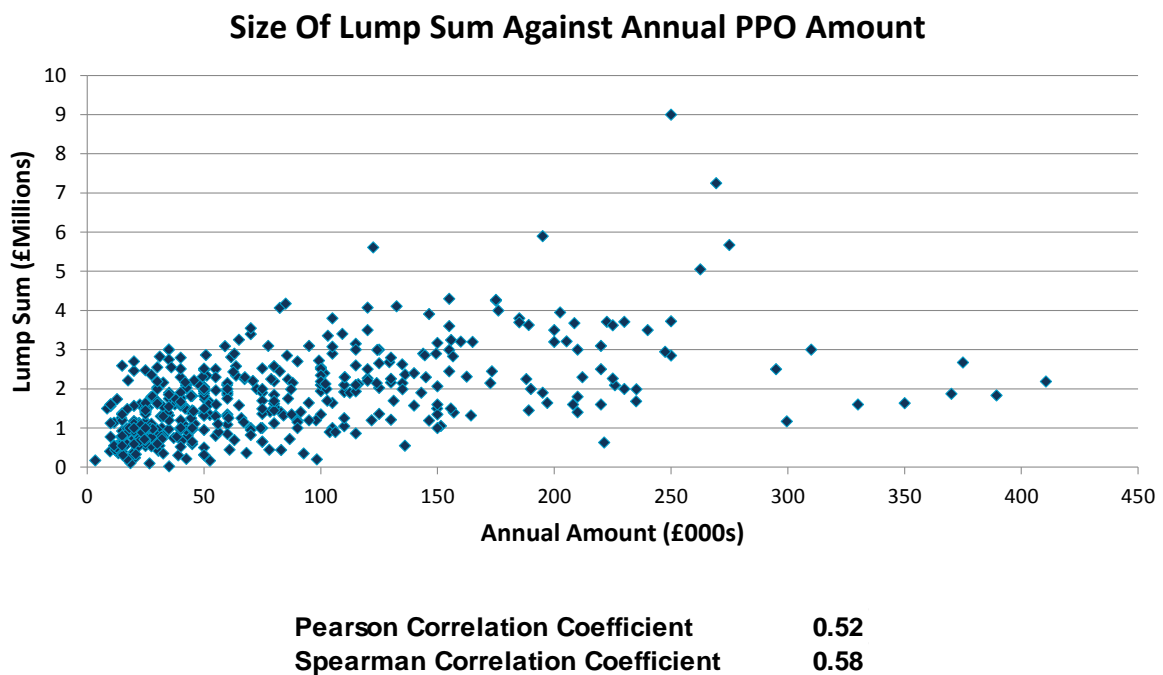
Size Of Lump Sum Against Annual PPO Amount

Pearson Correlation Coefficient	**0.52**
Spearman Correlation Coefficient	**0.58**

Figure 3.17: Scatter of the initial annual Motor PPO amount and the Lump sum amount

It can also be seen that there is a trend where PPOs with larger reductions in life expectancy have higher annual PPO amounts; this would make sense as more serious injuries are likely to have higher care costs and will also lead to shorter life expectancy.
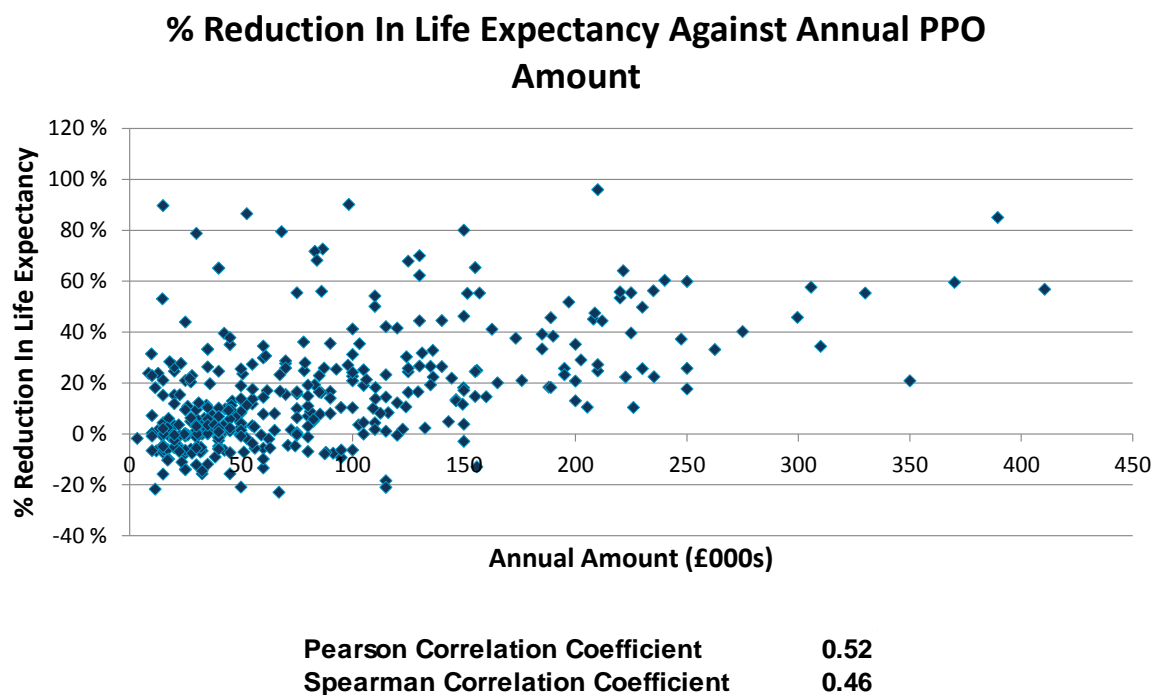
% Reduction In Life Expectancy Against Annual PPO Amount

Pearson Correlation Coefficient	**0.52**
Spearman Correlation Coefficient	**0.46**

Figure 3.18: Scatter Graph of reductions in life expectancy and Motor PPO payment amounts

3.6   Stepped PPOs and other statistics

A significant proportion (26%) of Motor PPOs have stepped payments. A stepped PPO is a PPO where there is a provision for step changes in the regular payment to be made. These stepped changes will apply at fixed points in time, to situations where a specific change in circumstance has already been foreseen at the time of settlement. For example, there could be a step payment of a one-off increase in payments to be made to account for a claimant whose parents are the primary carers. This would allow for the time when the parents cannot deliver the same standard of care and additional care costs will need to be incurred.

This is different to a variation order, which is an allowance for a change in the payment amount usually triggered by a certain event such as the claimant developing additional symptoms in the future as a result of the original accident. Variation orders only specify the conditions of the trigger event at the time of settlement and do not specify the amounts that the payments will change to.

Indemnity and Reverse Indemnity guarantees are also not included as stepped payments (See Table 3.2 and description below).

The majority of step changes tend to be increases, but it should be noted that the step change could be either upward or downward.

The following graph in Figure 3.19 shows that claimants of younger ages at the accident date are more likely to have stepped payments. Younger claimants are more likely to require changes to their care as they grow older which suggests why we see this trend.
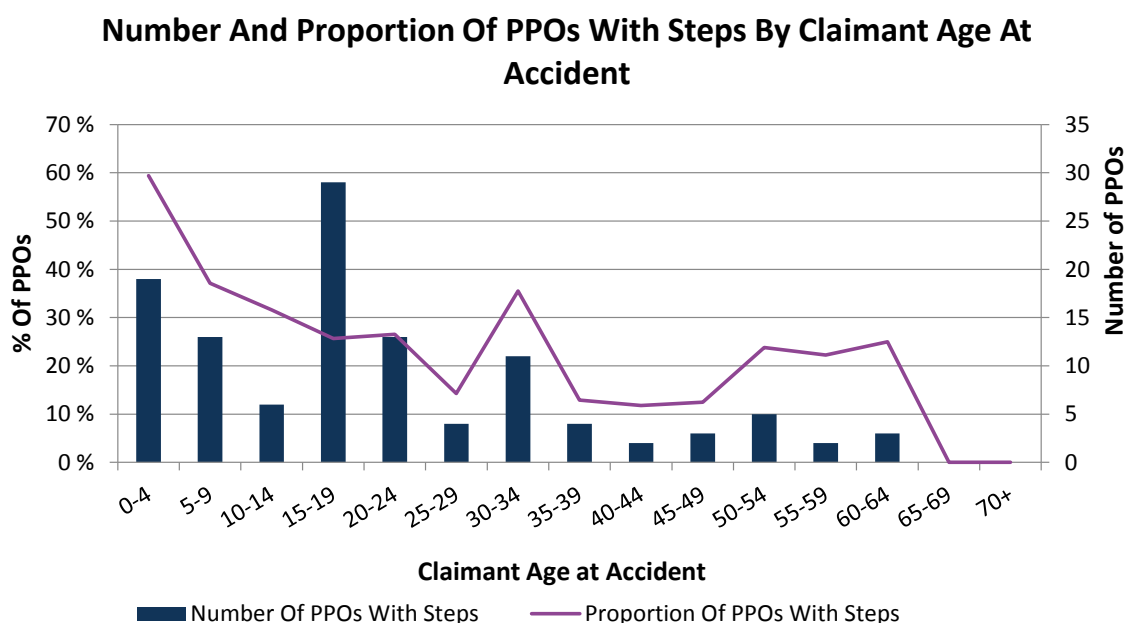
Number And Proportion Of PPOs With Steps By Claimant Age At Accident

Figure 3.19: The number and proportion of Motor PPOs that include a step payment agreement by age of claimant

The data suggests that claimants with a spinal injury are also more likely to have a stepped payment than those with a brain injury (40% against 23%). This might be a result of the care regime for spinal injuries being more variable over a claimant's lifetime than that for brain injuries. As claimants with spinal injuries get older, they require a much higher level of care.

Table 3.2 below shows some statistics regarding the proportion of Motor PPOs that have various features. Please note that these figures are the number of PPOs that are recorded as having the feature, divided by the total number of Motor PPOs for which a response to that particular question was received. The table also shows the number of responses received (note that there are 442 Non-MIB Motor PPOs in total in the survey).

Feature	Proportion of Motor PPOs	Number of Responses
Contributory Negligence	22%	282
Indemnity Guarantees	6%	198
Reverse Indemnity Guarantees	10%	110
Stepped Payments	26%	442
Variation Order	21%	299

Table 3.2: Proportion of PPOs with different features

There are 62 Motor PPOs with variation orders in the market. This is a significant increase on the number recorded last year and is due to contributors updating their data. Of these, the 39 with descriptions provided all allow for revision of the order if pre-specified conditions develop. Data was not sufficient to establish whether the severity of injury of the claim is correlated with variation orders, however, of these 62 PPOs, a high number related to spinal injuries (52% as compared to the general Motor PPO population proportion of 22%).The most prominent pre-specified condition that could lead to a revision of the PPO is deterioration due to Syringomycelia (cyst within the spinal cord). Other conditions include epilepsy.

79% of Motor PPOs are paid annually and 15% quarterly with the rest being paid monthly or bi-annually.

The majority of claims have a single PPO claimant, with just 49 accidents that have two or more PPO claimants.

Only 22% of claims, for which the relevant information was provided, had some sort of contributory negligence.

In the majority (76%) of cases for which information was provided as to who decided on (pushed for) the PPO, it was solely the claimant who decided on the PPO. In 15% of cases it was a mutual decision between claimant and defendant, and about 9% of the cases were decided on by court. There was one PPO where the decision was driven by the defendant.

An indemnity guarantee is a guarantee given by the insurer to pay additional costs in circumstances such as where services provided by the local council are reduced or withdrawn in the future. A reverse indemnity guarantee would cover the opposite situation; for example, where the insurer can reduce their payments if the claimant increases their reliance on public provision of care.

Indemnity guarantees appear to be quite rare, applying to only 12 PPOs. Reverse indemnity guarantees occurred in 11 Motor PPO cases however it is worth noting that the data regarding these sections was missing from a large number of insurer's submissions.

The name of the solicitor's firm was supplied in 235 out of the 442 PPOs. About 150 different solicitors were named. Irwin Mitchell and Stewarts together make up about a third of all Motor PPO cases where named. There was insufficient data provided on the legal firms involved in (non-PPO) large claims to be able to assess the PPO propensity by legal firm.

4   Motor PPOs – Nature of Injury

The vast majority, about 74%, of the PPOs in the survey related to brain injuries and 22% to spinal injuries. Some claimants suffered multiple injuries, and Figure 4.1 represents only the primary injury.
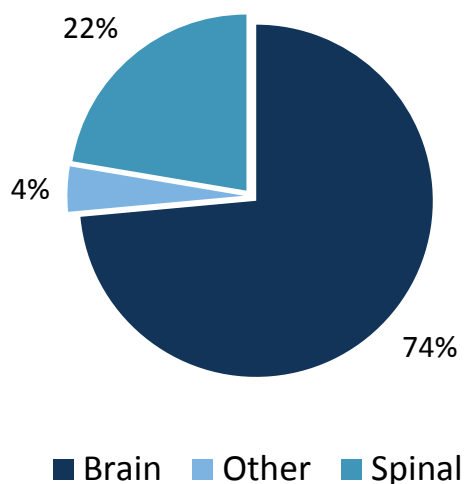
Nature Of Primary Injury - Motor

Figure 4.1: Pie chart showing Motor PPOs by Injury

The proportion of Motor PPOs from brain injuries increased slightly in 2014, and has been generally increasing since 2010, although the absolute numbers of spinal and brain injuries have increased by similar amounts.

Proportion Of Motor PPOs By Settlement Year And Injury Type
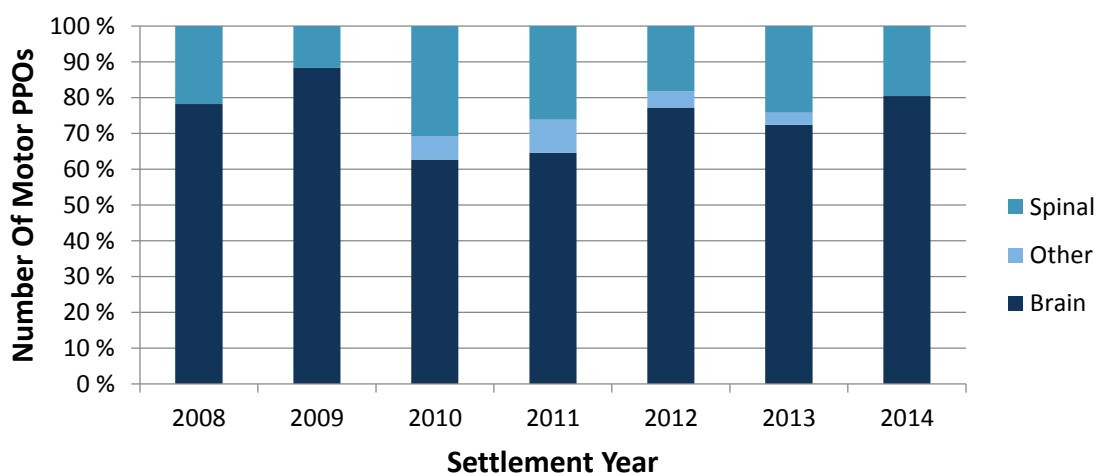
Figure 4.2: Proportion of Motor PPOs relating to Brain and Spinal Injuries by settlement year

Figure 4.3 below shows the proportion of PPOs that were due to brain and spinal injuries for different age bands. The graph suggests that the younger the Motor claimant is at the accident date the higher the chance the injury is a brain related one.
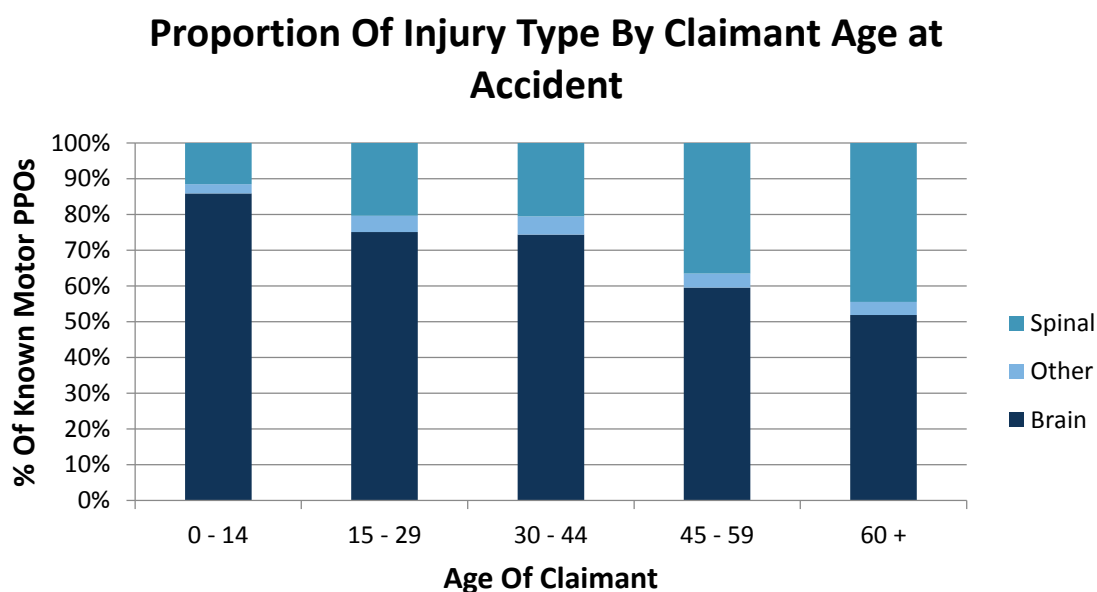
Proportion Of Injury Type By Claimant Age at Accident

Figure 4.3: Proportion of Motor PPOs by injury type split by age of claimant at time of accident

The following graph shows the number of PPOs in each banding to give an indication of credibility.

Number Of PPOs By Injury Type And Claimant age at Accident
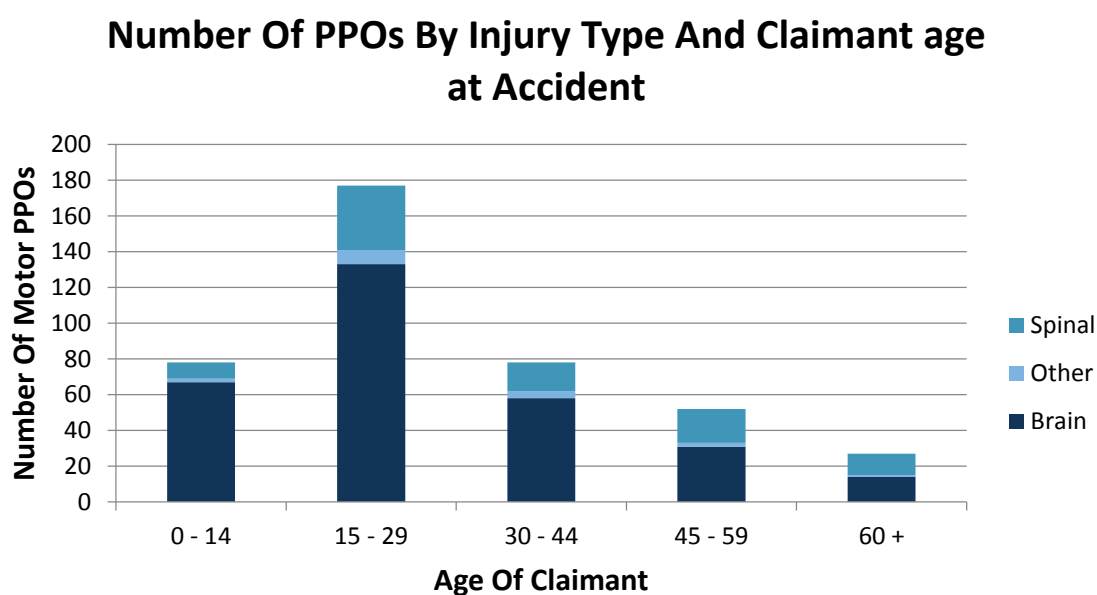
Figure 4.4: Number of Motor PPOs by injury type split by age of claimant at time of accident

Note that we are now only going to consider brain and spinal injuries and will be ignoring the 4% of other injuries.

Figure 4.5 below suggests that PPOs with claimants suffering from spinal injuries are settled quicker than those involving claimants with brain injuries (4.8 years on average as compared to 6.9 years); in the graph below the peak is sooner and the tail is much less. This could be because spinal injuries are easier and clearer to diagnose more rapidly. However it could also be related to brain injury claimants generally being younger.

Delay To Settlement By Injury Type
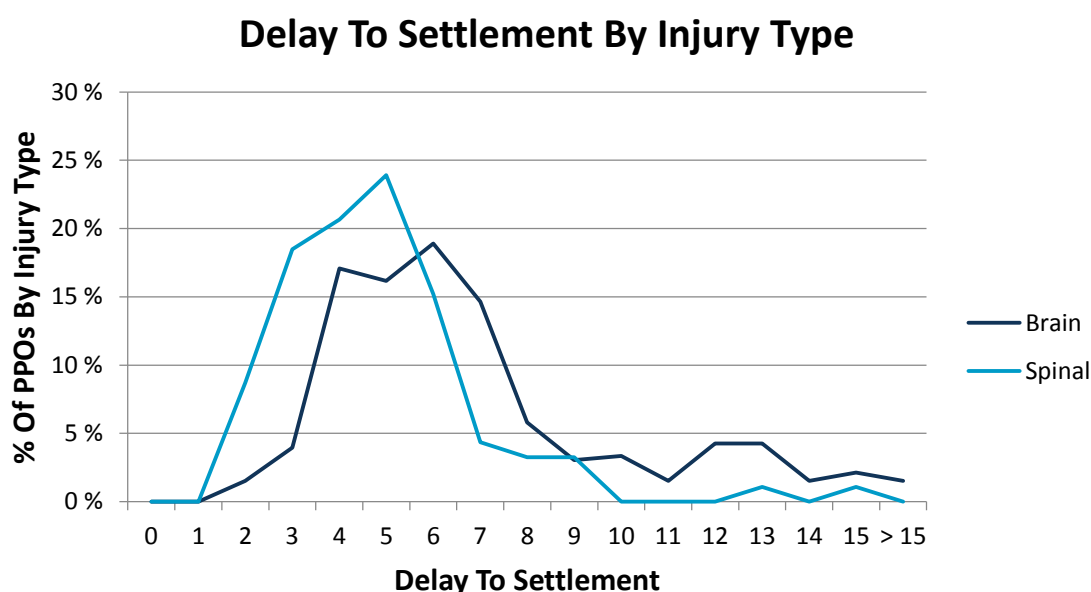
Figure 4.5: Distribution of Delay to settlement in years from accident date, split by Injury type

The following graph shows the distributions of reduction in life expectancy compared to unimpaired life expectancy, by injury type. The data suggests that these distributions are significantly different, with claimants suffering from spinal injuries typically experiencing greater reductions. The average future life expectancy at settlement for brain injuries is 49 years and is 39 years for spinal injuries, with the average reduction from unimpaired life expectancy being 12% and 25% respectively. This will be partly due to the majority of young claimants suffering brain injuries, as seen in Figure 4.3, but may not explain the trend fully. There is more uncertainty around the reduction in spinal life expectancy, as a result of the small number of settled PPOs associated with spinal injuries.
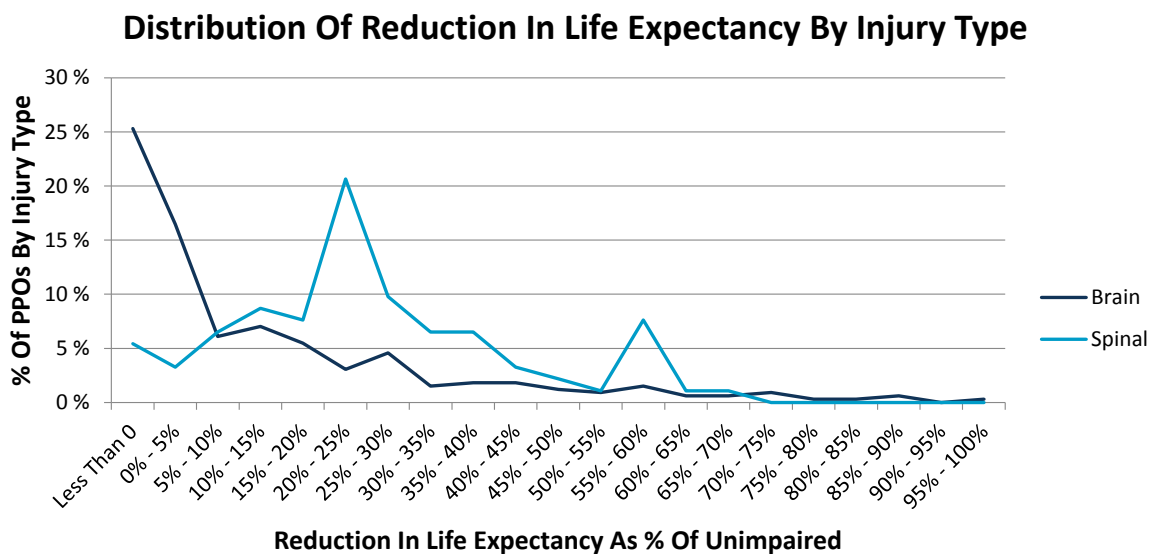
Distribution Of Reduction In Life Expectancy By Injury Type

Figure 4.6: Distribution of Reduction in life expectancy (as percentage of unimpaired), by Injury type

Spinal injury PPOs have a higher average lump sum than brain injury PPOs, at £2.3 million for spinal injuries and £1.6 million for brain injuries (where both figures are in nominal terms and do not consider inflation over settlement years), which can be seen in the distributions shown in Figure 4.7 below. Note that the graph below also uses the nominal value of the lump sums.

Lump Sum Value By Injury Type
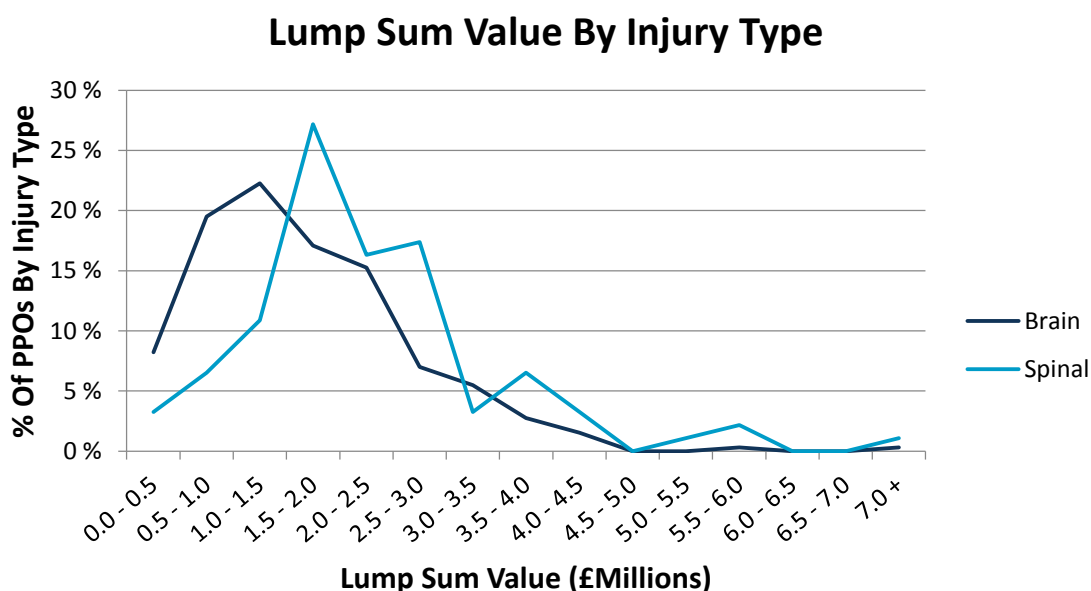
Figure 4.7: Distribution of Lump Sum values, split by Injury type

As with lump sums, the annual PPO amounts for spinal injuries are also typically higher than those for brain injuries, as seen below in Figure 4.8 (with the average annualised PPO amount in nominal terms for spinal injuries at £110,400 compared to £76,800 for brain injuries). Note that in the above

figures and the below graph the annualised PPO amounts include payments for all heads of damage, and are the amounts initially paid at settlement (ignoring stepped payments).
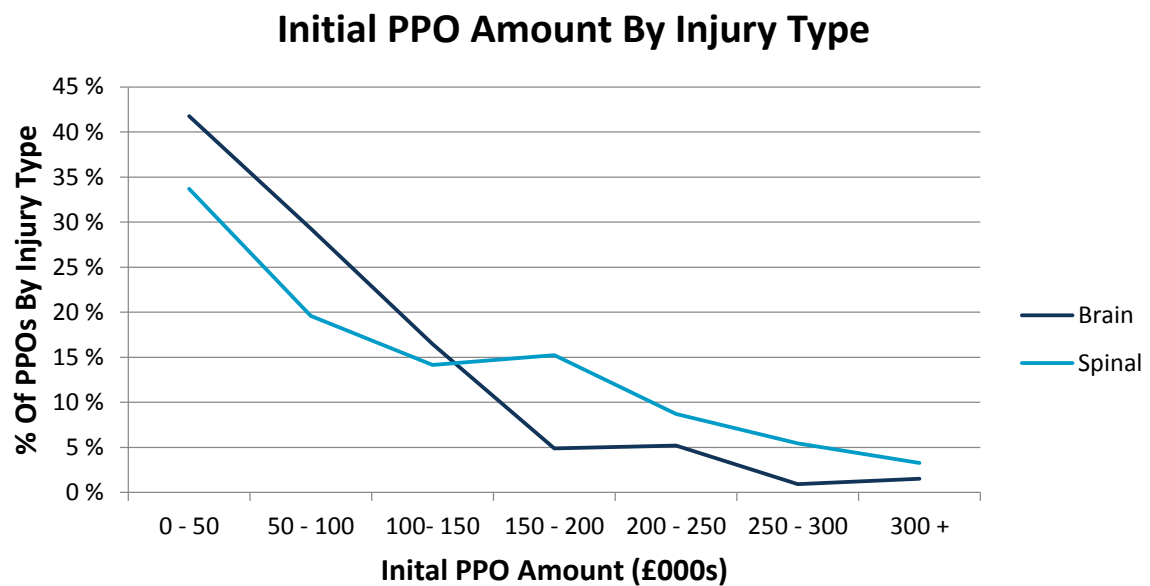
Initial PPO Amount By Injury Type

Figure 4.8: Distribution of Regular PPO payment amount, split by injury type

5   Motor PPOs – Comparison of Private and Commercial Covers

Private Motor PPO settlements increased in number until 2011. However, the data suggests that the number of private Motor PPOs settled each year levelled off in 2012 and decreased in 2013 and 2014 (which contributes to the reduction in the total number of large claims settlements in 2013 and 2014 as well as the falling PPO propensity in 2014).
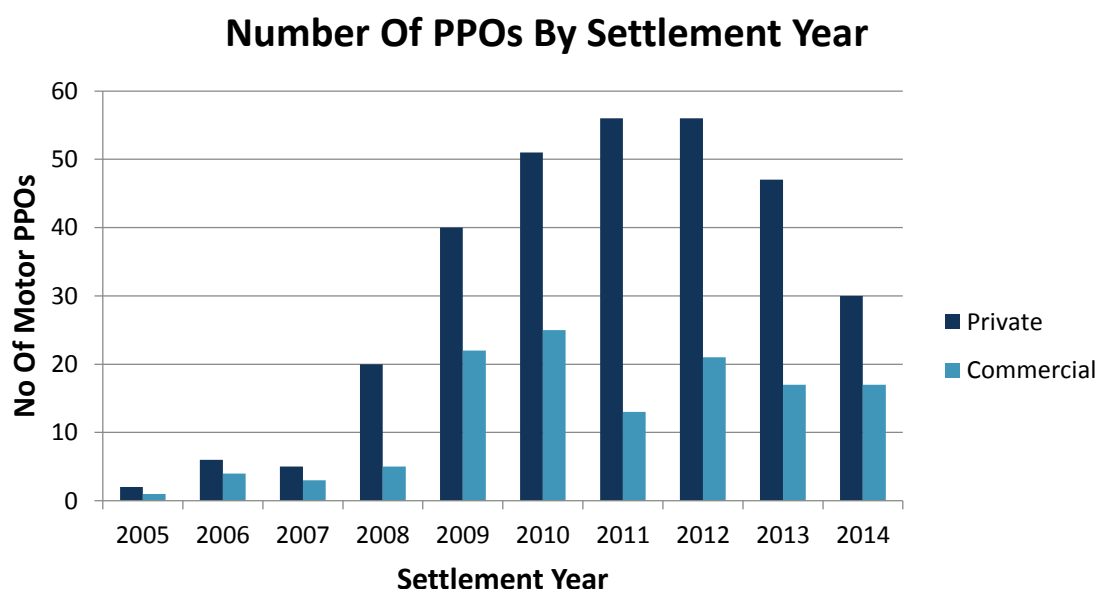
Number Of PPOs By Settlement Year

Figure 5.1: Number of Private and Commercial Motor PPOs by settlement year

The decreasing trend in the number of Private Motor PPOs drives the trend across the whole of the Motor book, as there are far fewer Commercial Motor PPOs. The PPO experience for Commercial vehicle cover is more volatile, but also shows a reduction in the number of PPOs settling in 2013 and 2014 when compared with 2009, 2010 and 2012.

Driver details

The two graphs in Figures 5.2 and 5.3 below compare the difference between drivers causing accidents that lead to PPOs under private and commercial covers. The driver age profile of commercial PPOs is less skewed to the younger ages than private Motor and has a higher average driver age.

The graphs below only include the PPOs for which the age and gender of the driver was available. These fields were missing in around 38% of private Motor PPOs and around 39% of commercial Motor PPOs.
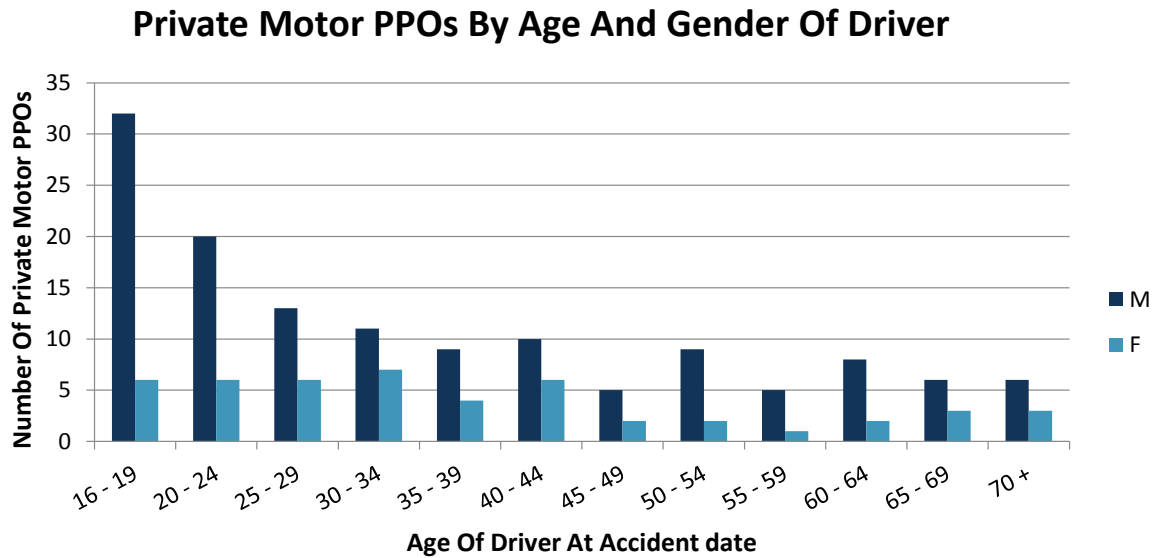
Private Motor PPOs By Age And Gender Of Driver

Figure 5.2: Number of Private Motor PPOs split by Gender and Age of driver at accident date

There are very few female drivers under the commercial Motor PPOs, which may be because there are fewer females that drive commercial vehicles.
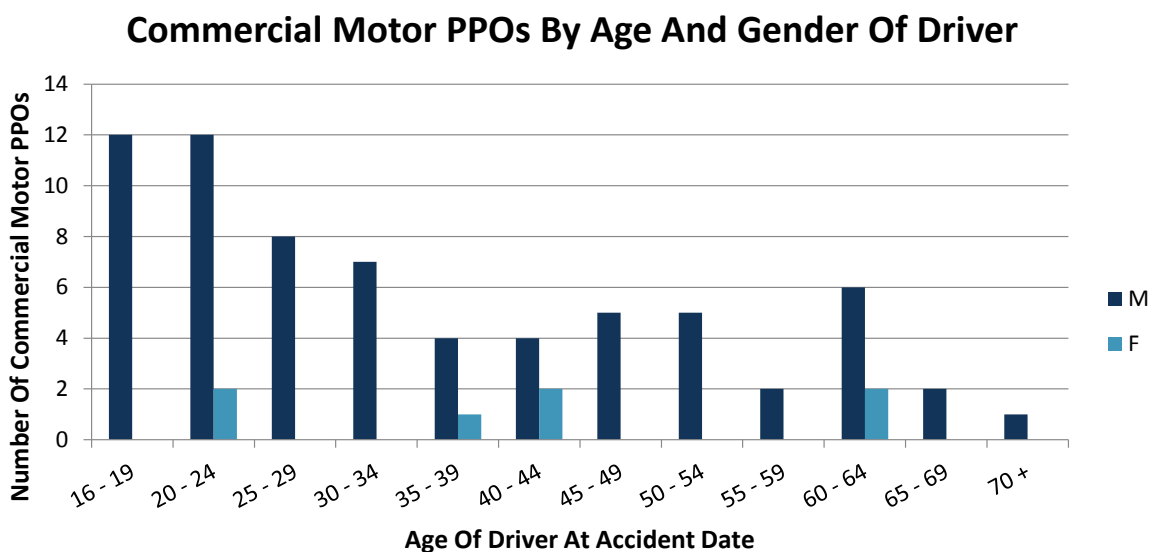
Commercial Motor PPOs By Age And Gender Of Driver

Figure 5.3: Number of Commercial Motor PPOs split by Gender and Age of driver at accident date

Claimant details

A similar difference can also be seen with age of claimant between private and commercial covers. However this is likely to be due to the correlation between driver age and claimant age, whereby young drivers are more likely to cause accidents that result in PPOs involving younger claimants.
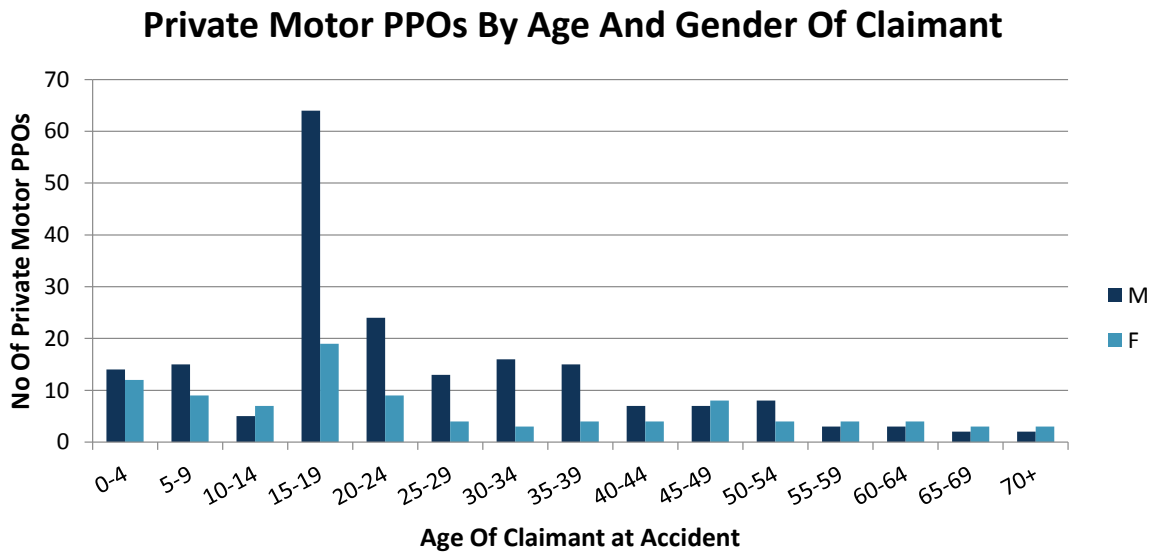
Private Motor PPOs By Age And Gender Of Claimant

Figure 5.4: Number of Private Motor PPOs split by Gender and Age of claimant at accident date

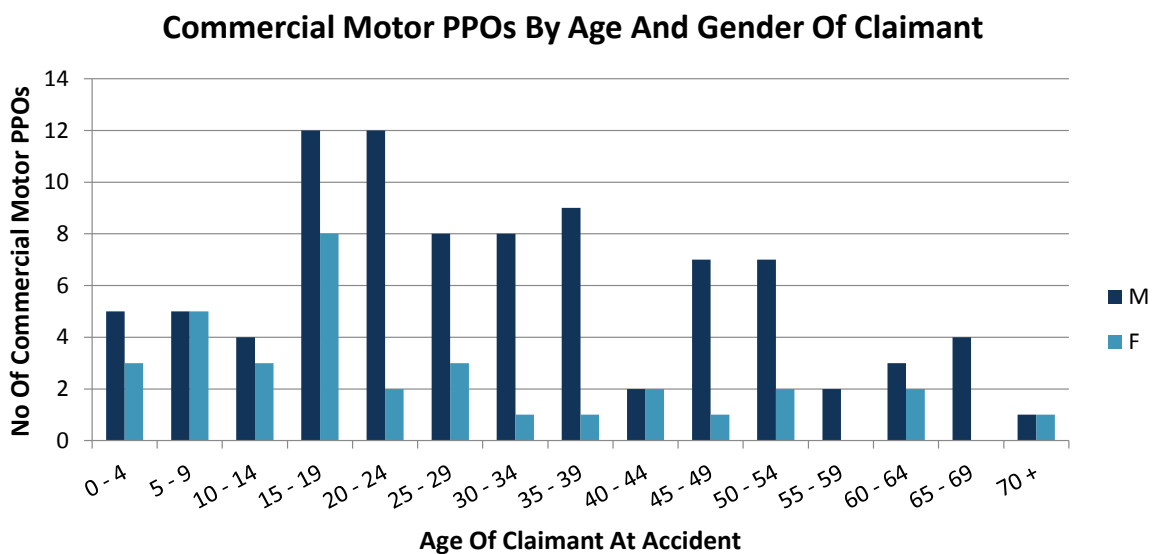## Commercial Motor PPOs By Age And Gender Of Claimant

Figure 5.5: Number of Commercial Motor PPOs split by Gender and Age of claimant at accident date

Driver and claimant age correlation

The correlation between age of driver and age of claimant is still evident under both private and commercial covers, as shown in Figures 5.6 and 5.7. The relatively fewer number of younger claimants for commercial Motor PPOs needs to be borne in mind when interpreting these graphs. In the figures below the coloured blocks represent the proportion of claimants in each age group.
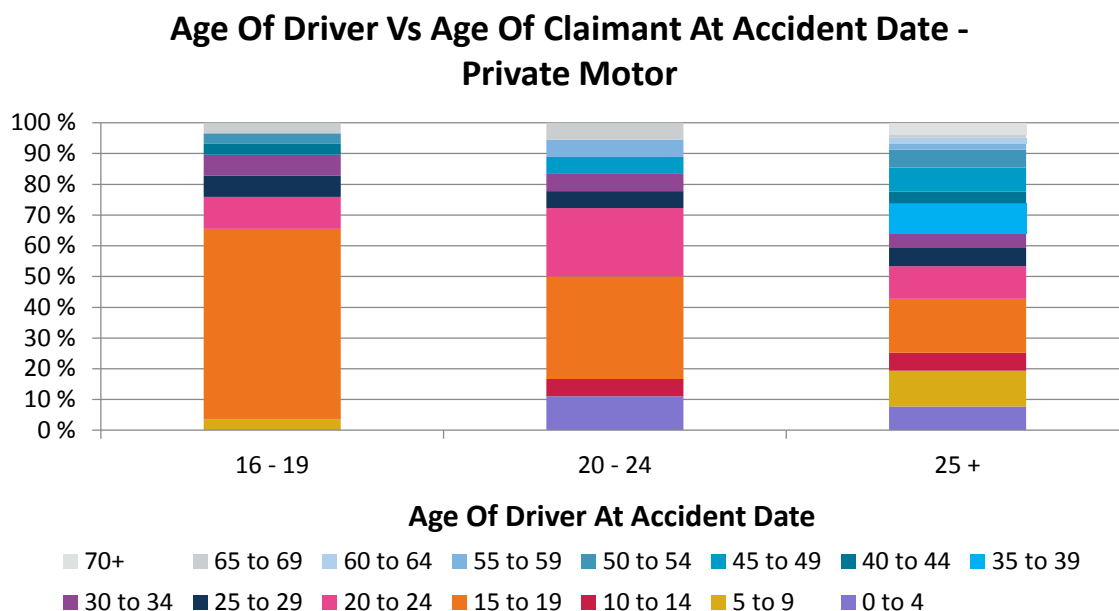

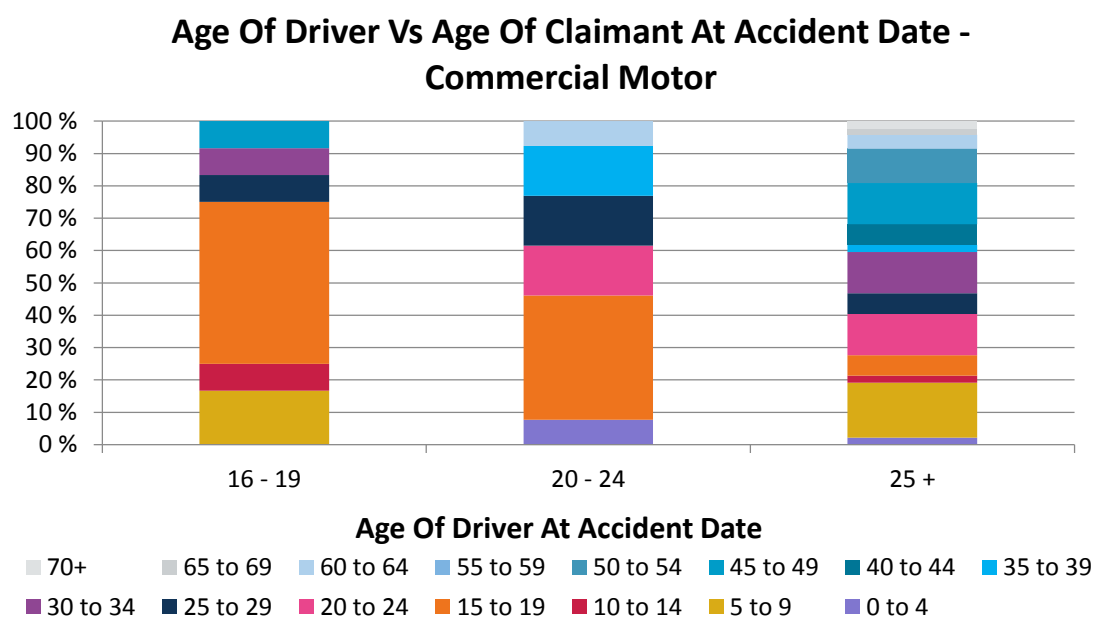*Figure 5.6: Correlation between age of driver and age of claimant at accident date for Private Motor*

Figure 5.7: Correlation between age of driver and age of claimant at accident date for Commercial Motor

Future life expectancy

The difference in claimant age profile between private and commercial covers also means that future life expectancy is significantly shorter for most PPOs arising under commercial covers. Since commercial claimants are older, the average future life expectancy from settlement is approximately 42 years, compared with 48 years for PPOs arising under private cover. The distribution of these future life expectancies is illustrated below in Figure 5.8.
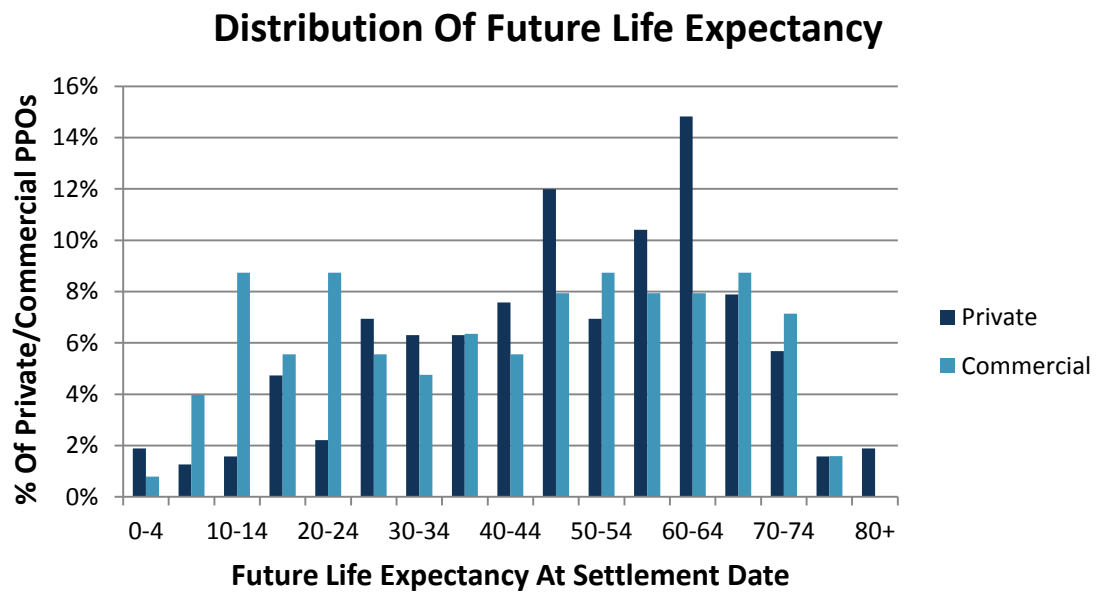

Figure 5.8: Distribution of Future Life Expectancy split by PPOs arising to Private/Commercial covers

6   Motor PPOs – Comp and Non-Comp Comparisons

We have compared the results for comprehensive and non-comprehensive PPOs arising out of private Motor covers. There were 241 PPOs recorded as being comprehensive cover and 78 PPOs as non-comprehensive cover, with the cover type missing for the remaining 71 private Motor PPOs. The number of non-comprehensive PPOs is comparatively small, so the results for non-comprehensive cover will be of reduced credibility.
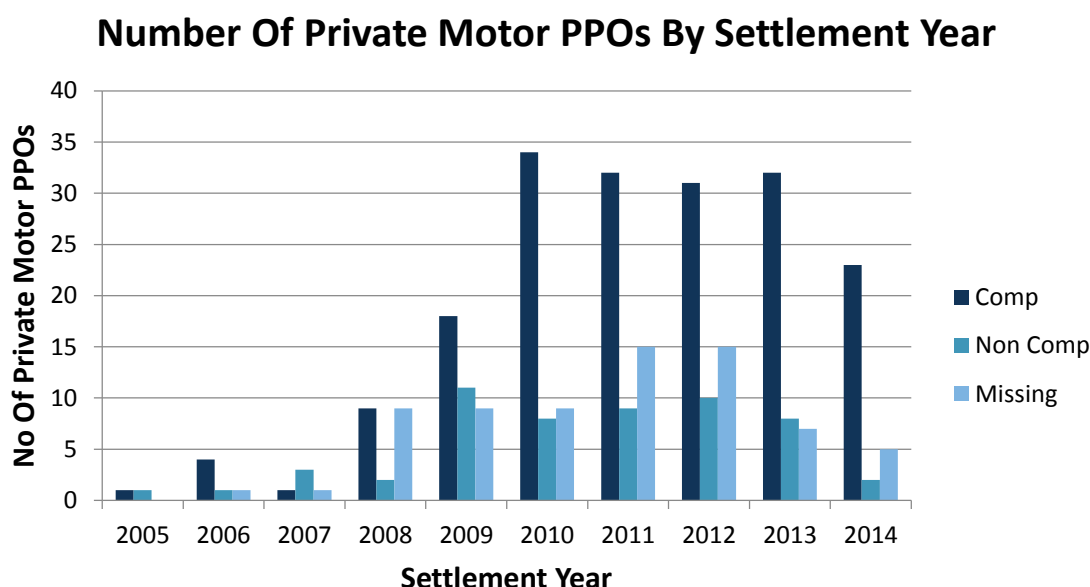
Number Of Private Motor PPOs By Settlement Year

Figure 6.1: Number of Private Motor PPOs split by Settlement year and cover type

Consistent with the movement in the total number of PPOs, the number arising from comprehensive and non-comprehensive covers has decreased in 2014.

Figure 6.2 below suggests that PPOs involving spinal injuries are proportionately less common under non-comprehensive covers than comprehensive covers (and brain injuries more common) however, as stated above, the results are likely to be of reduced credibility due to the small number of non-comprehensive PPOs.
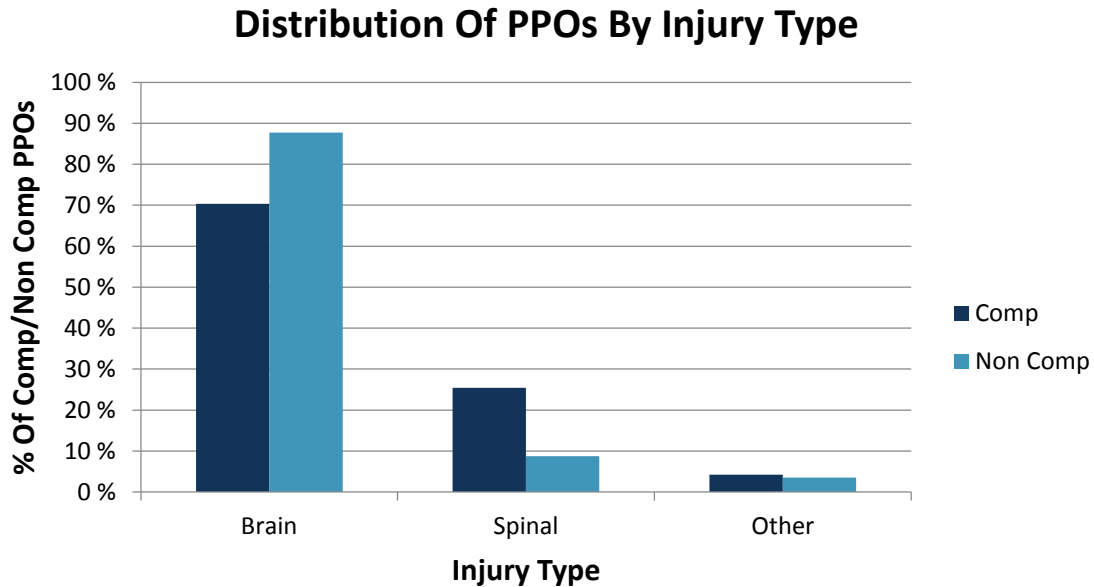
Distribution Of PPOs By Injury Type

Figure 6.2: Distribution of Private Motor PPOs by injury type split by cover type

From looking at Figure 6.3 below, there appear to be proportionally more PPOs relating to young drivers from non-comprehensive covers than from comprehensive covers, this is probably because younger drivers are more likely to have purchased non-comprehensive Motor insurance, potentially due to the price of available cover.
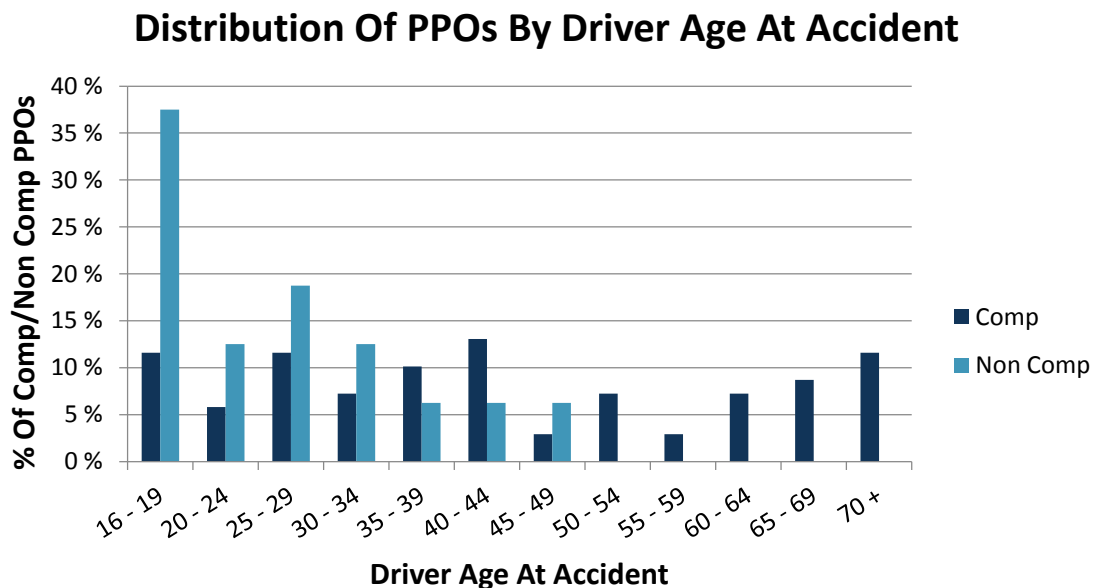
Distribution Of PPOs By Driver Age At Accident

Figure 6.3: Distribution of Private Motor PPOs by Driver age at accident date
split by cover type

A similar difference can also be seen with age of claimant at accident date, with a higher proportion of teenage claimants under non-comprehensive cover as shown in Figure 6.4 below. This is likely to

be due to the correlation between driver age and claimant age, particularly driven by teenagers who tend to ride in cars together.

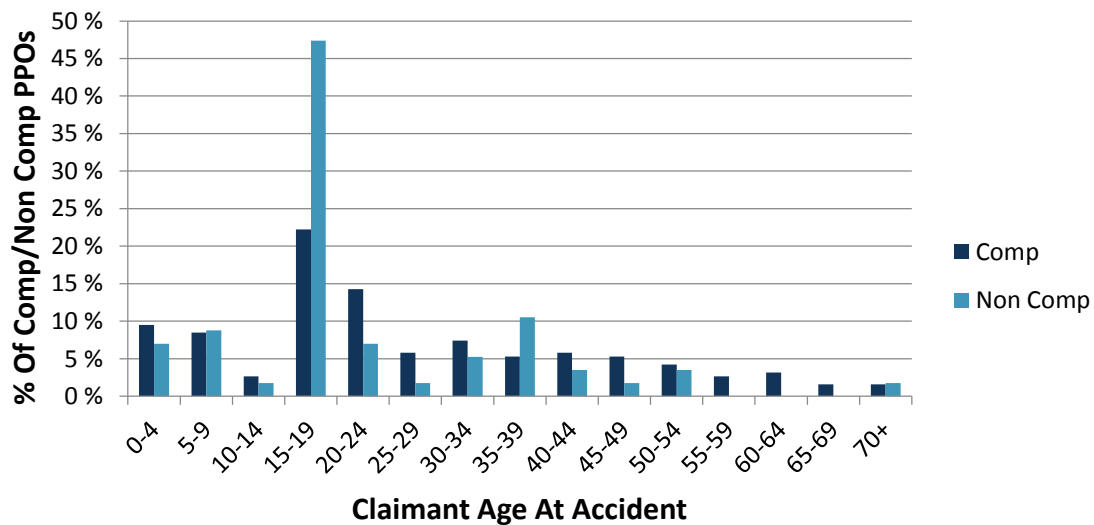## Distribution Of PPOs By Claimant Age At Accident

Figure 6.4: Distribution of Private Motor PPOs by Claimant age at accident date split by cover type

The difference in claimant age profile also means that future life expectancy from settlement tends to be longer for PPOs arising under non-comprehensive cover rather than comprehensive cover. This is shown in Figure 6.5 below.

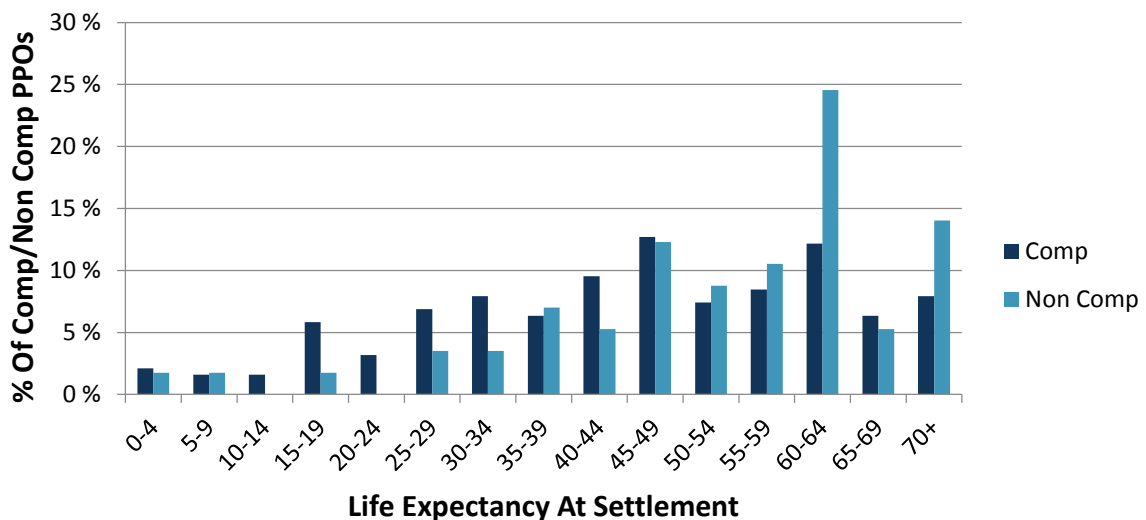## Distribution Of PPOs By Life Expectancy At Settlement

Figure 6.5: Distribution of Private Motor PPOs by Future Life expectancy from settlement date split by cover type

The following two graphs in Figures 6.6 and 6.7, show the distribution of private Motor PPOs by age of claimant at date of accident by gender, for PPOs arising from comprehensive and non-comprehensive covers respectively.

The peak for age group 15-19 seen in both graphs shows more differentiation between males and females for PPOs arising from non-comprehensive cover (in Figure 6.7), but this may be due to the small sample size. There is a greater proportion of female PPO claimants than male claimants at older ages which may be as a result of more males driving at older ages, due to generational gender inequalities, resulting in more third party female passenger claims where the driver is of advancing age.

Age Of Claimant At Accident Date By Gender - Comprehensive Cover
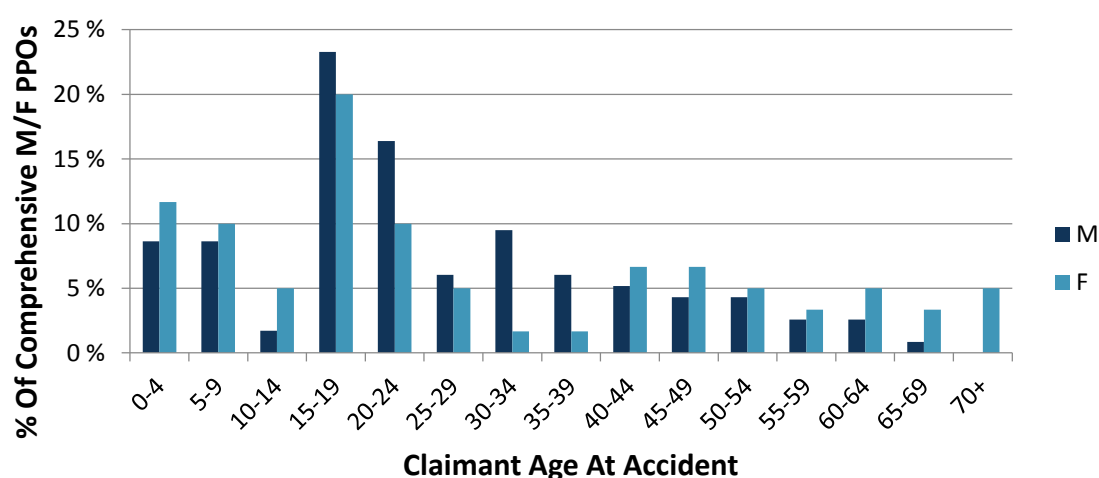

Figure 6.6: Distribution of Private Motor Comprehensive Cover PPOs by claimant age at accident split by gender

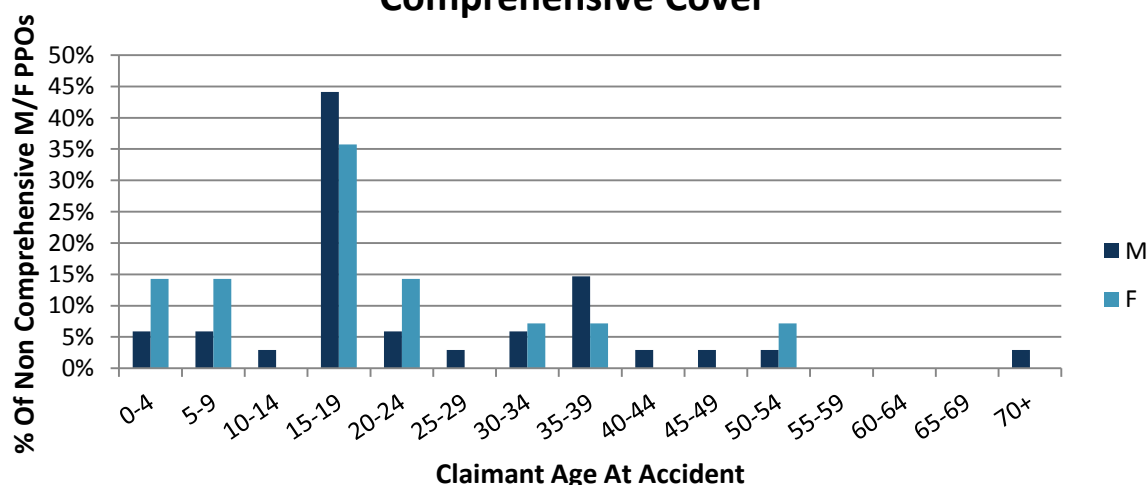## Age Of Claimant At Accident Date By Gender - Non Comprehensive Cover

Figure 6.7: Distribution of Private Motor Non-Comprehensive Cover PPOs by claimant age at accident split by gender

7   Liability PPOs

There were 48 Liability PPOs in the survey, from 10 insurers (as not all of the contributors offer Liability insurance).

It is possible that the existence of indemnity limits on Employers and Public Liability covers is impacting PPOs settled under Liability covers, as discussed in the PPO propensity section (Section 2). These limits are usually applied to nominal claim amounts in the UK, hence would be exhausted more quickly for a PPO than for a lump sum in many circumstances. Figure 7.1 below shows the number of Liability PPOs settled each year since 2005.

Number Of Liability PPOs By Settlement Year
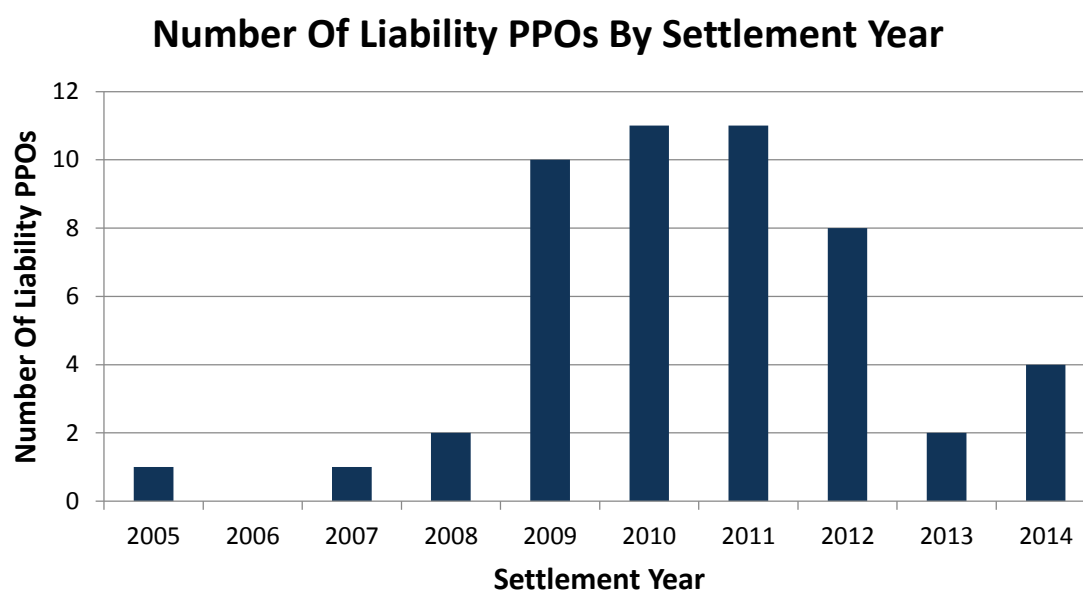
Figure 7.1: Number of Liability PPOs by settlement year

The pattern of settlement of Liability PPOs is broadly similar to that of the Motor PPOs, in that the number of PPOs settled each year since 2009 has been fairly level and has reduced in 2013 and 2014. The smaller sample size will almost certainly account for some additional random noise in the numbers.

All of the Liability PPOs in the survey fall into one of the two cover types in Figure 7.2, with Employers' Liability accounting for about two thirds of the total Liability PPOs.

Liability Cover Type

Figure 7.2: Split of Cover type between Employers' Liability and Public Liability

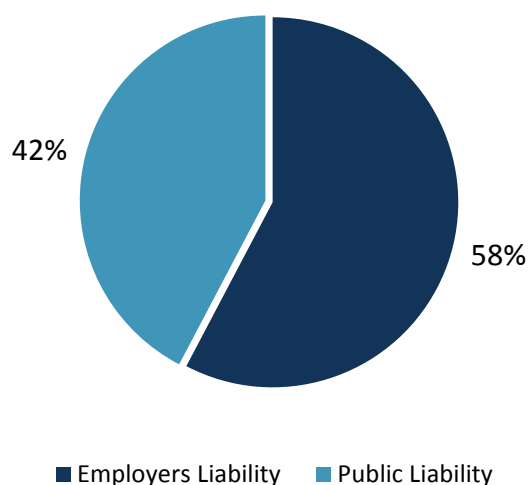All but three of the Liability PPOs are indexed to ASHE 6115 (care workers) indexation. One is linked to RPI, one ASHE 53 and the other is linked to Indemnity Cost of Care.

As seen below, in Figure 7.3, the 80th percentile has been the most popular for PPOs arising under Liability covers since 2009 and 100% of all PPOs settled in 2012 onwards are indexed to it. (Note that settlement year 2008 is comprised only of 2 PPOs).

Figure 7.3 only considers the primary heads of damage for the Liability PPOs. However, only one Liability PPOs has a second head of damage, which is indexed to ASHE 6115 .

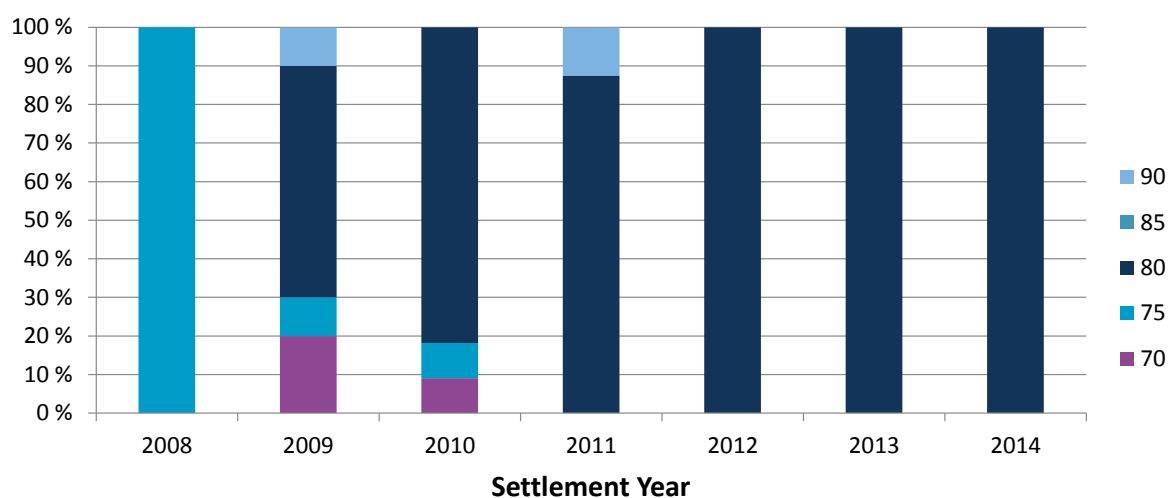## ASHE Percentiles For Liability PPOs By Settlement Year

Figure 7.3: Distribution of ASHE percentiles used for Liability PPOs

Spinal injuries appear to be significantly more common under Liability coverage, as shown in Figure 7.4. The nature and cause of accidents under Motor and Liability covers are likely to be very different, with those under Liability cover more likely to be accidents such as trips and falls, as opposed to high speed crashes that would be more common under Motor insurance.

Distribution By Injury Type
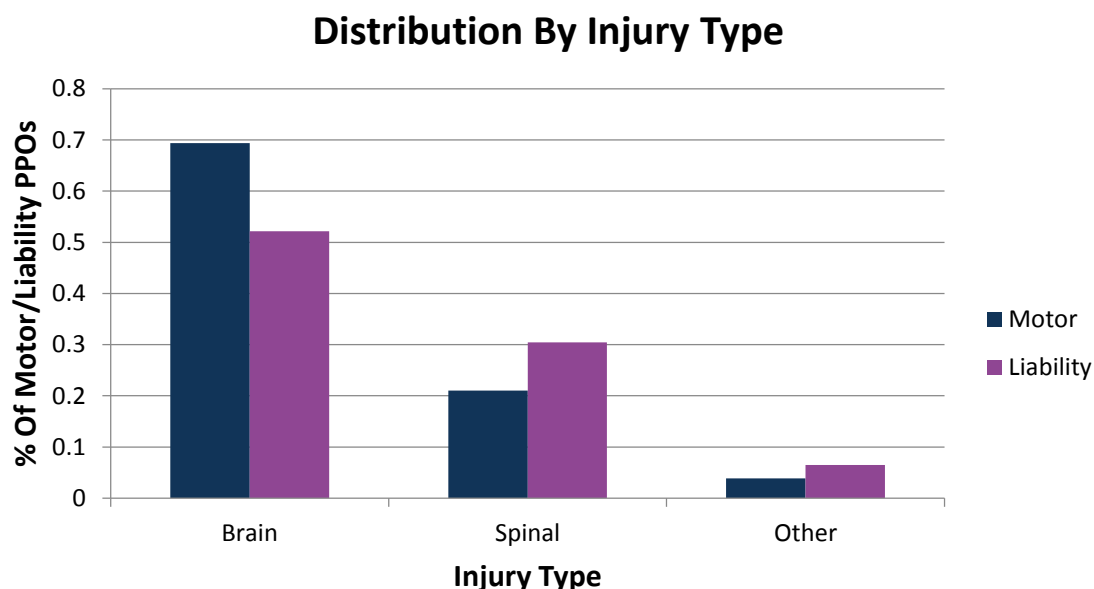
Figure 7.4: Distribution of Motor and Liability PPOs by Injury Type

Claimant details – Employers' Liability and Public Liability

As shown in Figures 7.5 and 7.6 below, nearly all claimants are male.

There appears to be no particular trend in the age of claimant, though virtually all claimants under Employers' Liability policies are of working age, as would be expected (we note that the data included one claimant in the 5-9 year old bracket).

Age Of Claimant At Accident Date - Employers' Liability
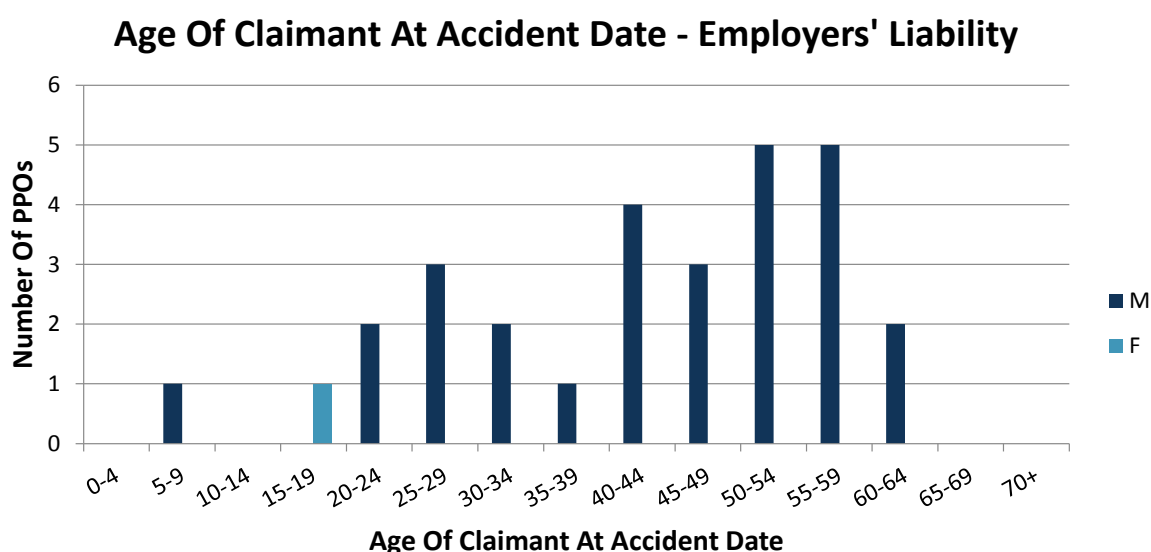
Figure 7.5: Distribution of Employers' Liability PPOs by age of claimant at accident date

Age Of Claimant At Accident Date - Public Liability
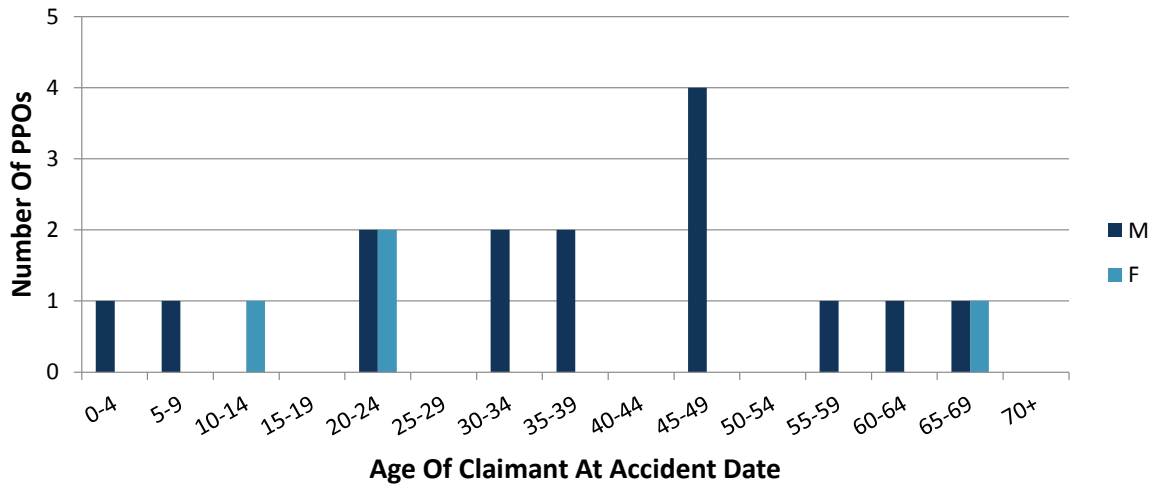
Figure 7.6: Distribution of Public Liability PPOs by age of claimant at accident date

Claimant details – Motor and Liability comparison

Figure 7.7 below shows that PPO claimants arising under Liability covers tend to be significantly older than claimants arising under Motor covers.

Distribution Of Claimant Age At Accident

Figure 7.7: Distribution of Motor & Liability PPOs by age of claimant at accident date

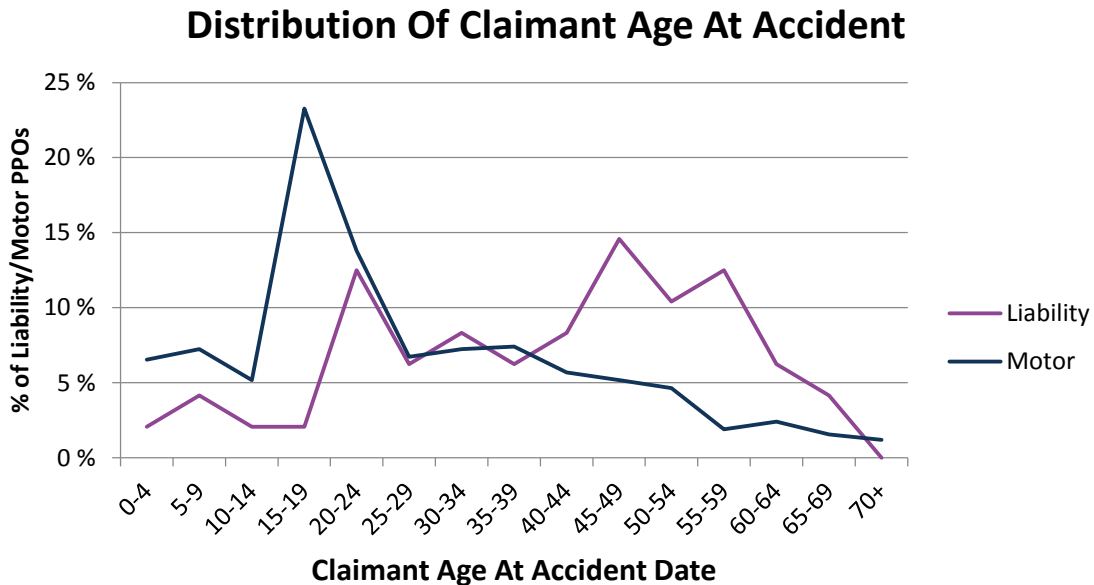Following on from the claimant age profile, the future life expectancy of claimants from Liability PPOs is significantly shorter than that of Motor PPOs, as shown in Figure 7.8 below. However, this is not unexpected, due to the nature of Employers' Liability insurance.

Distribution Of Future Life Expectancy
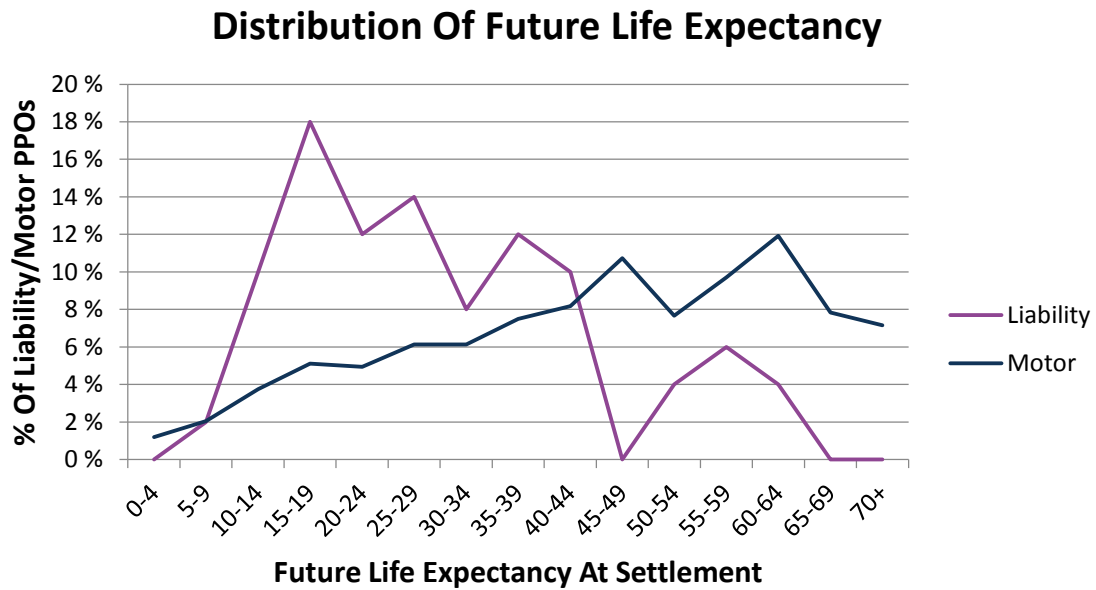
Figure 7.8: Distribution of Motor & Liability PPOs by future life expectancy from date of settlement

PPO details – Motor and Liability comparison

There is some evidence in Figure 7.9 that Liability PPOs may settle quicker than Motor PPOs, though due to the small sample size any attempt to use this statistic should be treated with extreme caution. There are fewer minors under Liability cover and we know that minors can have longer delays to settlement as decisions are often delayed until the claimant has reached the age of maturity. This would imply that we would expect to see fewer claims in the tail of the distribution for Liability covers. In addition, we saw in Section 4 that spinal injuries may settle quicker than brain injuries and there are proportionately more spinal injuries under Liability cover than Motor cover.

Distribution By Years to Settlement
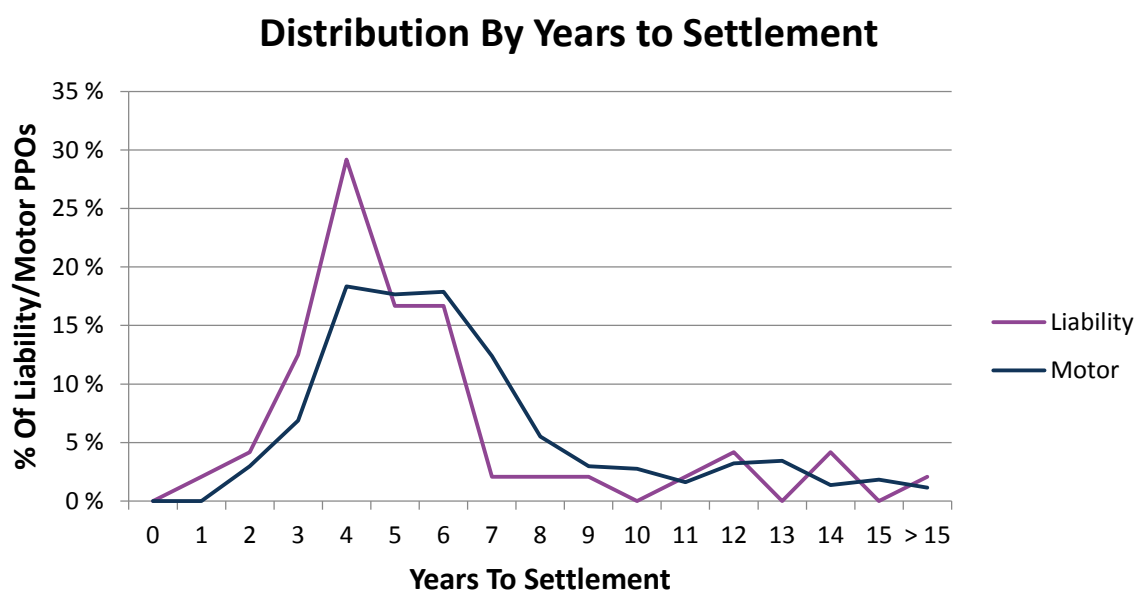
Figure 7.9: Distribution of Motor & Liability PPOs by delay to settlement in years from accident date

Figure 7.10 shows that Liability PPOs appear to have a lower lump sum associated with them than Motor PPOs do. This is likely to be due, at least in part, to the higher average age of claimants under Liability covers, thus meaning wage compensation, which is often awarded within the lump sum rather than the periodic payments, would be paid for fewer years. In addition, large claims under Employers' Liability covers tend to arise from manual and semi-skilled workers who may have lower than average wages. The previously mentioned lower PPO propensity at higher claim values will also be contributing to a lower average lump sum value, as there will be fewer large PPOs, which would be expected to have a higher lump sum amount. Note that the lump sums in Figure 7.10 are nominal amounts and have not been indexed by settlement year.

Distribution By Lump Sum Amount
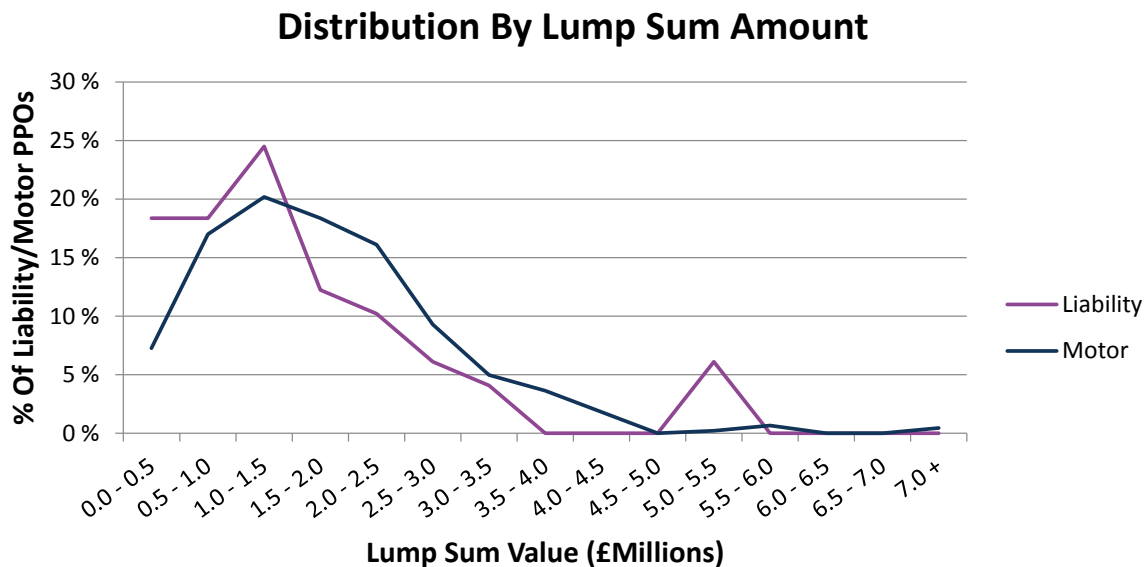
Figure 7.10: Distribution of Motor & Liability PPOs by lump sum value

Figure 7.11 below shows that the distribution of PPO amounts appears to be similar between Liability and Motor PPOs. The initial payments correspond to the sum across all heads of damage, and are the amounts paid initially following settlement (ignoring stepped payments).

Distribution By Initial Payment Amount
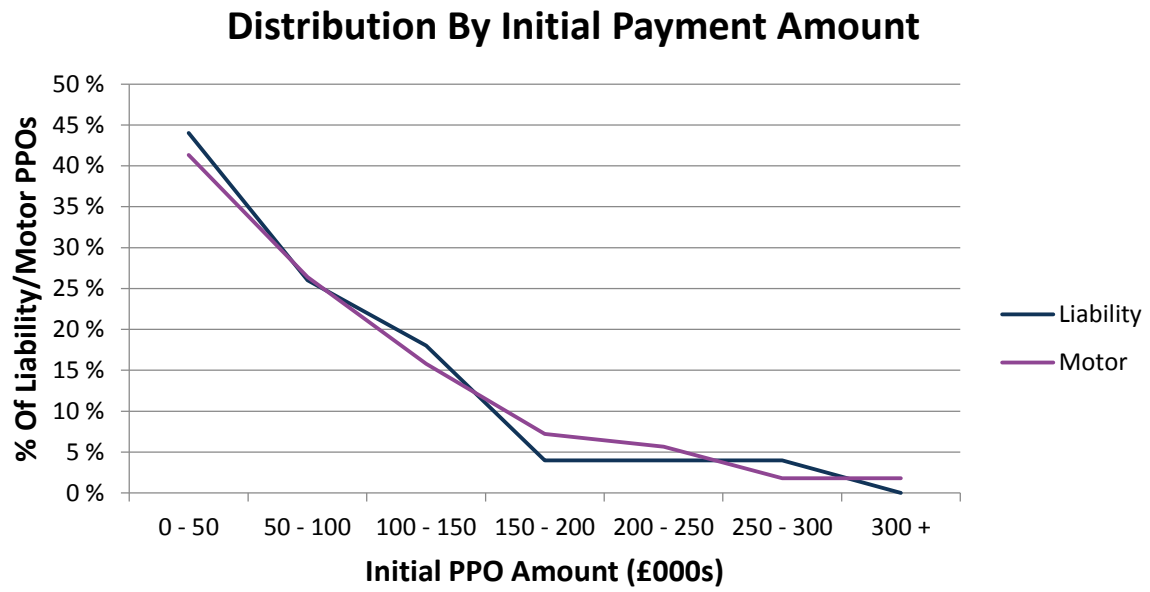
Figure 7.11: Distribution of Motor & Liability PPOs by regular PPO payment amount at settlement date

8 Motor Insurers' Bureau (MIB) Experience

The MIB was established in 1946 to compensate the victims of negligent uninsured and untraced motorists. Every insurer which underwrites compulsory Motor insurance is obliged to be a member of the MIB and to contribute to its funding.

We have chosen to show the results of the MIB experience separately because, as the MIB covers uninsured or untraced motorists, we thought their profile of claims may be different from the rest of the Motor insurance industry. Whilst there are some differences, most notably in the propensity rate, the age of claimants and the size of lump sums, the following results show that in many cases the profile of PPOs for the MIB is actually quite similar to that of the rest of the industry.

Some of the fields requested, such as nature of injury and driver details, were not readily available and so were not provided.

8.1 Propensity

Figure 8.1 below shows the number of MIB claims settled in each year. It can be seen that the number of PPOs settled by the MIB each year has remained relatively constant since 2007, with the exception of a spike in numbers seen in 2009 and 2012.

Number of MIB PPOs by Settlement Year
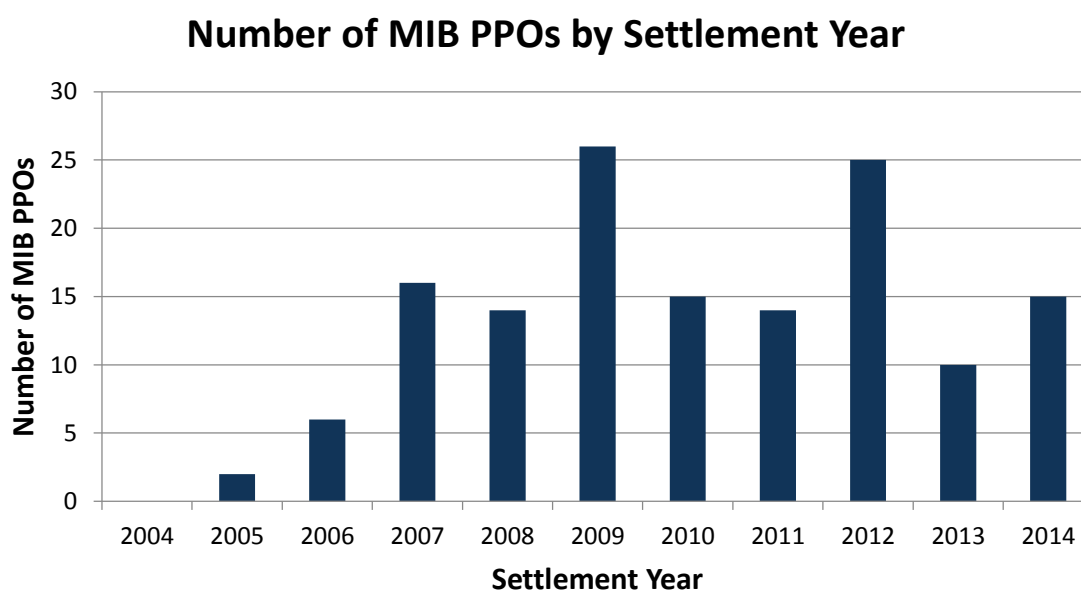
Figure 8.1: Number of PPOs settled by the MIB each year

Figure 8.2 below shows how the proportion of total PPOs in the survey that are settled by the MIB each year has changed. Before 2009 (and with the exception of 2007) the MIB were settling around 40% of the PPOs each year; however this has decreased in recent years to between 10% and 30% of the market. As was seen in Figure 8.1 the absolute number of PPOs settled by the MIB each year has remained relatively constant since 2007 (with the exception of 2009 and 2012), so this decrease in proportion is likely to be related to the fact that the MIB started settling a sizeable number of PPOs from late 2006, a couple of years before the rest of the market.

Proportion of PPOs settled by the MIB/Industry by settlement year
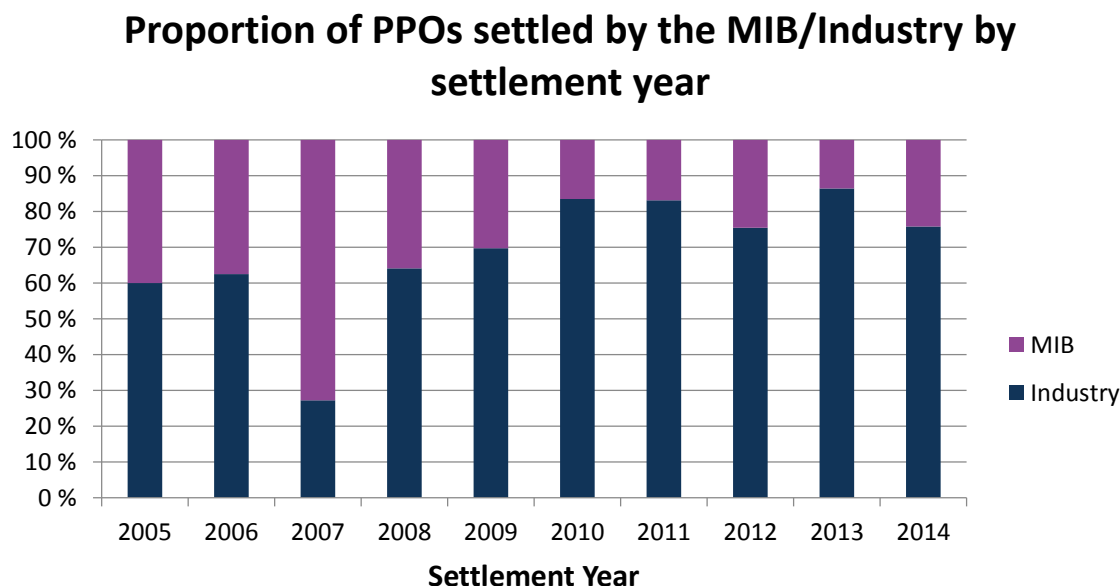
Figure 8.2: Proportion of PPOs settled by the MIB compared with the rest of the Industry each year

Figure 8.3 below shows the number of Motor PPOs settled by the MIB in comparison to the rest of the market by settlement year.

Number of PPOs settled by the MIB/Industry by settlement year
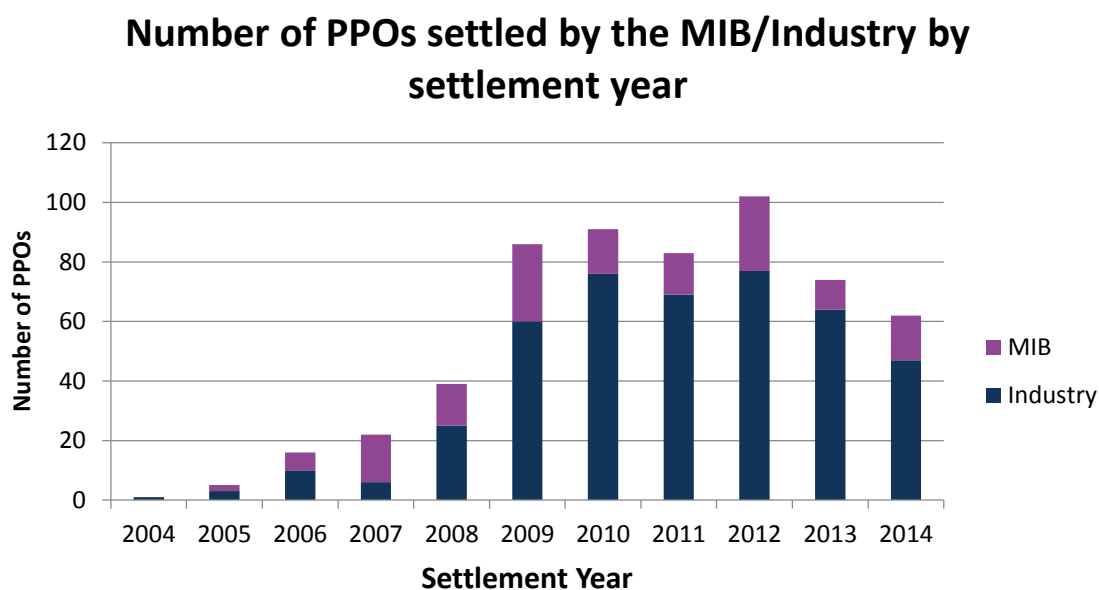
Figure 8.3: Number of PPOs settled by the MIB or the rest of the Industry each year

Figure 8.4 below shows the number of PPOs settled by the MIB in each accident quarter. By comparing with Figure 3.3 it can be seen that the MIB started settling a sizeable amount of PPOs from the fourth quarter of 2006, much earlier than the main market. It is also worth noting that half of the PPOs settled by the MIB before the Thompstone vs Tameside Appeal at the beginning of 2008 were indexed to RPI, however, after the appeal only one PPO is indexed to RPI with the rest indexed to ASHE.
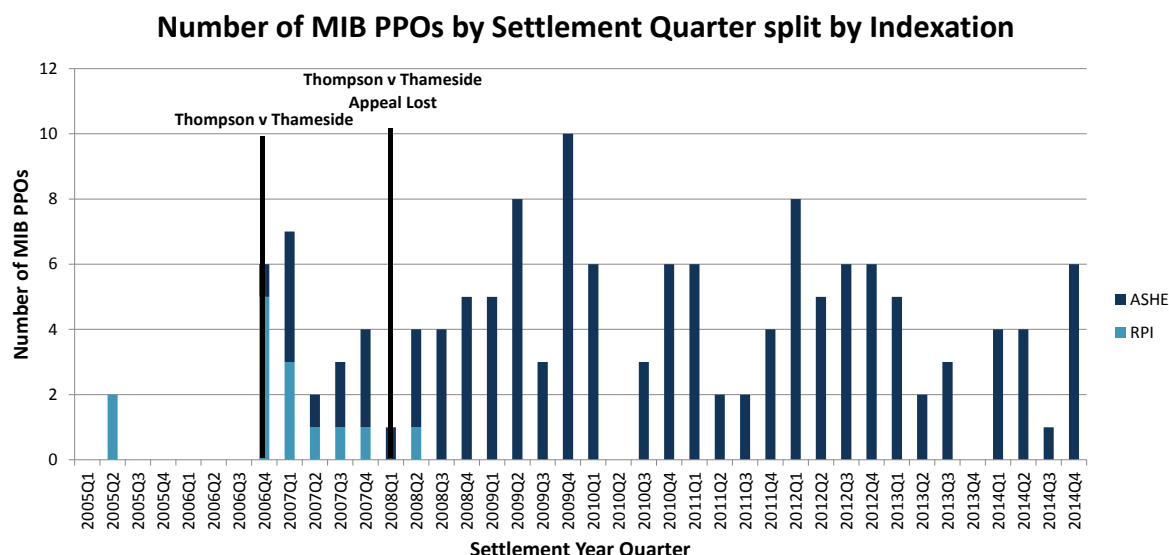
Figure 8.4: Number of PPOs settled in each quarter by the MIB split by index used for Initial PPO for each claim

8.2 PPO Characteristics
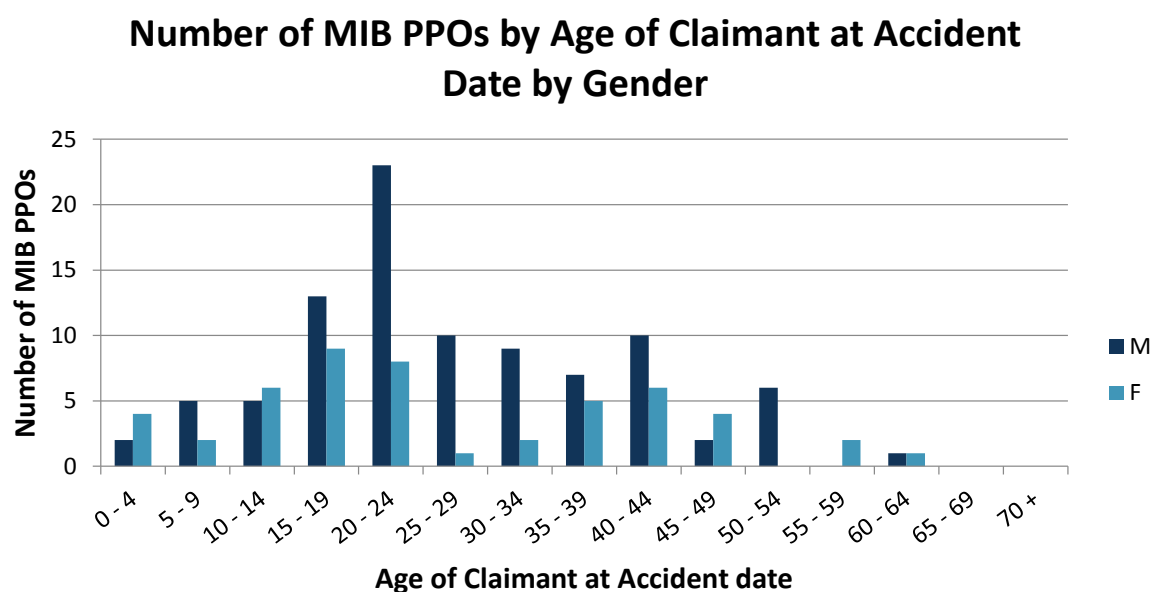
Figure 8.7: Number of PPOs settled by the MIB split by Age of claimant at accident date split by gender

The distribution of claimant age can be seen to be similar to the age profile of claimants seen in the market. However there appear to be a lower proportion of claimants who are minors in the MIB figures, and proportionately more MIB claimants in the 20 to 24 age bracket, as can be seen in Figure 8.8 below.

Distribution of MIB PPOs by Age of Claimant at Accident Date
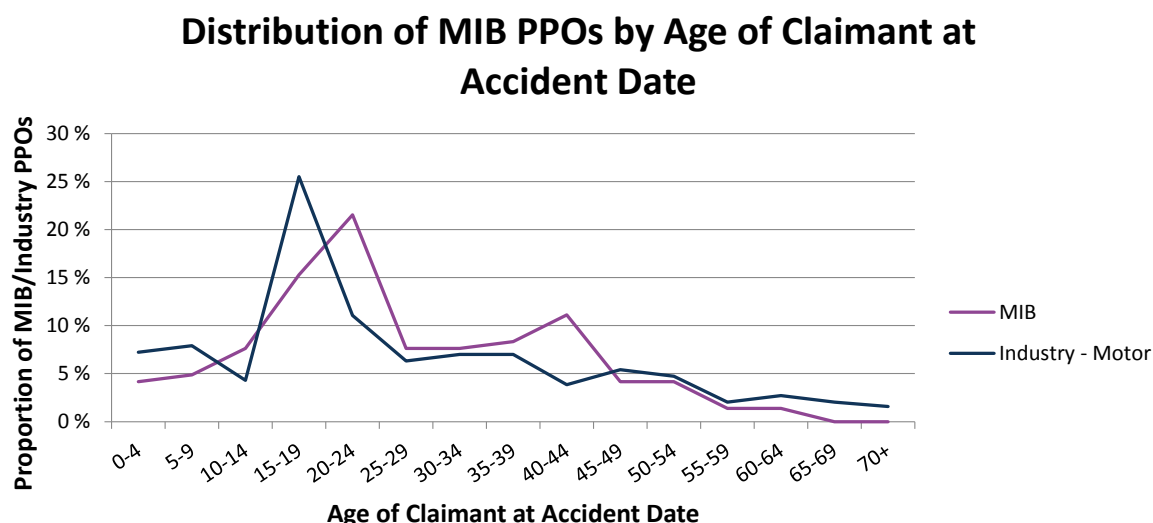
Figure 8.8: Comparison of distributions of PPOs settled by MIB/Industry by Age of claimant at accident date

The distribution of claimant age at date of settlement can be seen below in Figure 8.9. Similar to the above, the distribution seems to follow that of the main market closely, however the peak at age group 20-24 is not as large, which is most likely due to the lower proportion of the claimants who are minors in the MIB data.

Distribution of MIB PPOs by Age of Claimant at Settlement Date

It can be seen in Figure 8.10 below that the distribution of delay until settlement for PPOs settled by the MIB is very similar to that of the main market.

Distribution of delay to settlement
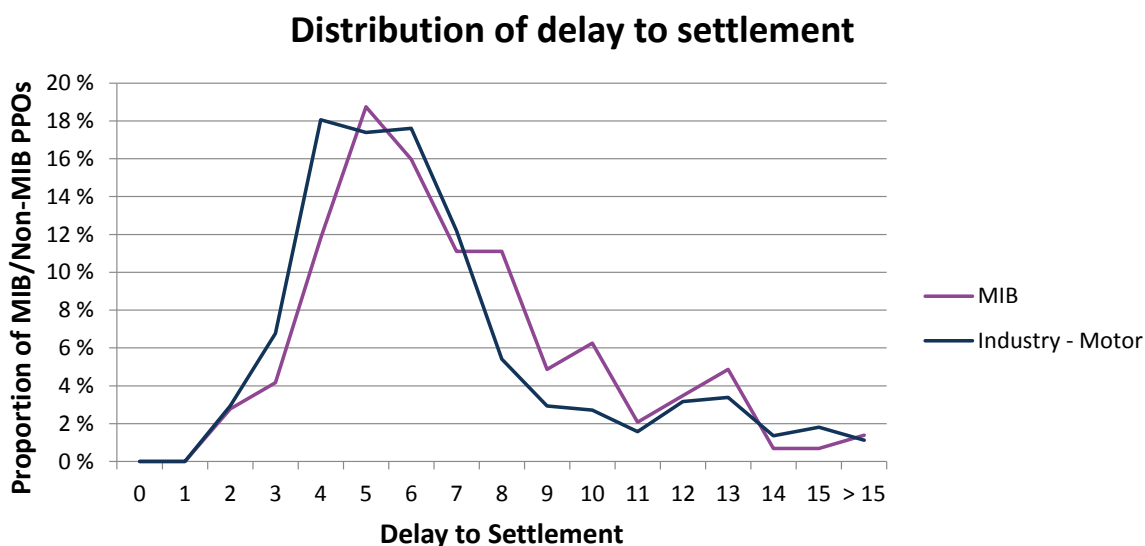
Figure 8.10: Comparison of Distributions of PPOs settled by MIB/Industry by Age Delay to Settlement

Figure 8.11 below compares the distribution of PPOs settled by both the MIB and the rest of the market by lump sum value. The lump sums awarded by the MIB appear to be significantly smaller, with an average lump sum value of £1.2 million compared to an average of £1.8 million for the rest of the market.
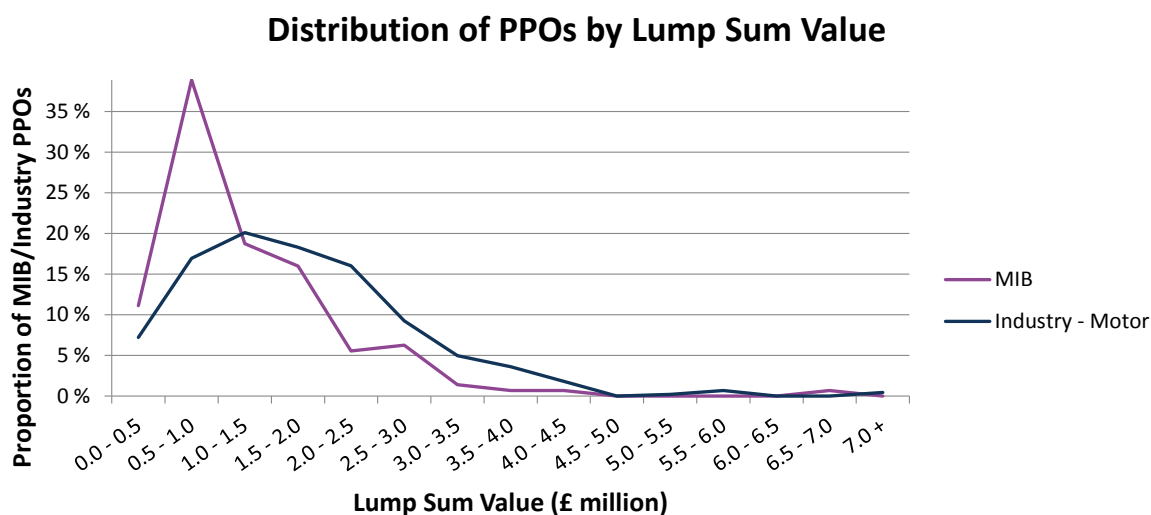
Distribution of PPOs by Lump Sum Value

Figure 8.12 below compares the distribution of PPOs settled by both the MIB and the rest of the market by initial PPO amount (as defined earlier in chapter 3). The distributions are broadly similar; although it does appear that the MIB has a larger proportion of the smaller PPO payments (ie less that £50,000). This means the average initial PPO for the MIB is over £20,000 less than industry PPOs (at about £61,000 compared to about £83,000 for the rest of the market).

Distribution of PPOs by Initial Amount
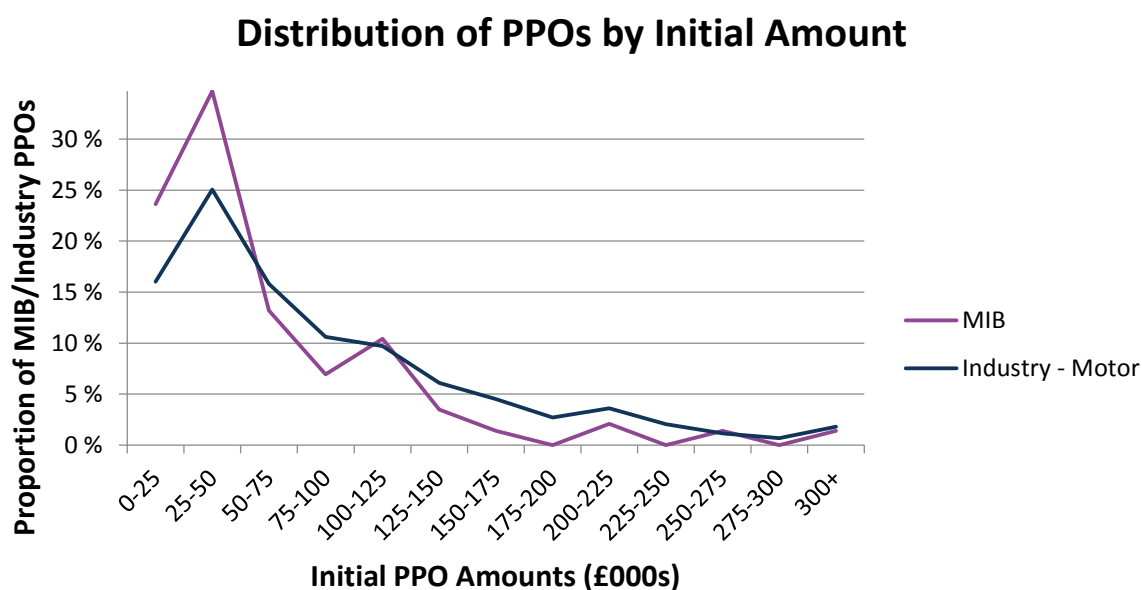
Figure 8.12: Comparison of Distributions of PPOs settled by MIB/Industry by Initial PPO amount

Figure 8.13 below compares the distribution of initial PPO amount by settlement year. Notice that in 2009, one of the years that had an unusual spike in the number of claims as shown in Figure 8.1, the distribution looks quite different to the following years with the peak occurring at initial PPO payments below £25,000. Hence it appears that there were greater smaller claims settled as PPOs in 2009 than in subsequent years. 2012, the other year that had an unusual spike, appears to have similar experience to the other years in the figure below.

Distribution of Initial PPO Amounts
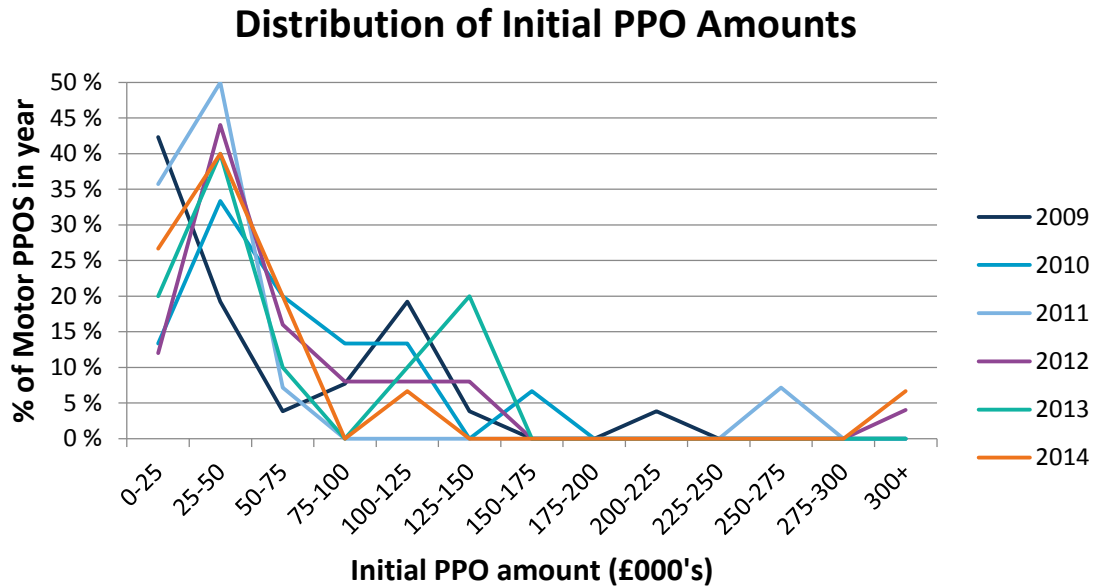
Figure 8.13: Comparison of distribution of initial PPO amount by settlement year

Figure 8.14 below appears to suggest that on average the future life expectancy for MIB claimants is slightly lower than for the rest of the market - the average life expectancy from date of settlement for MIB claimants is 42 years as opposed to 46 years for the rest of the market. This is consistent with the observation from figure 8.8 that there are proportionately fewer minors in the MIB data.

Distribution of Future Life Expectancy from Settlement Date
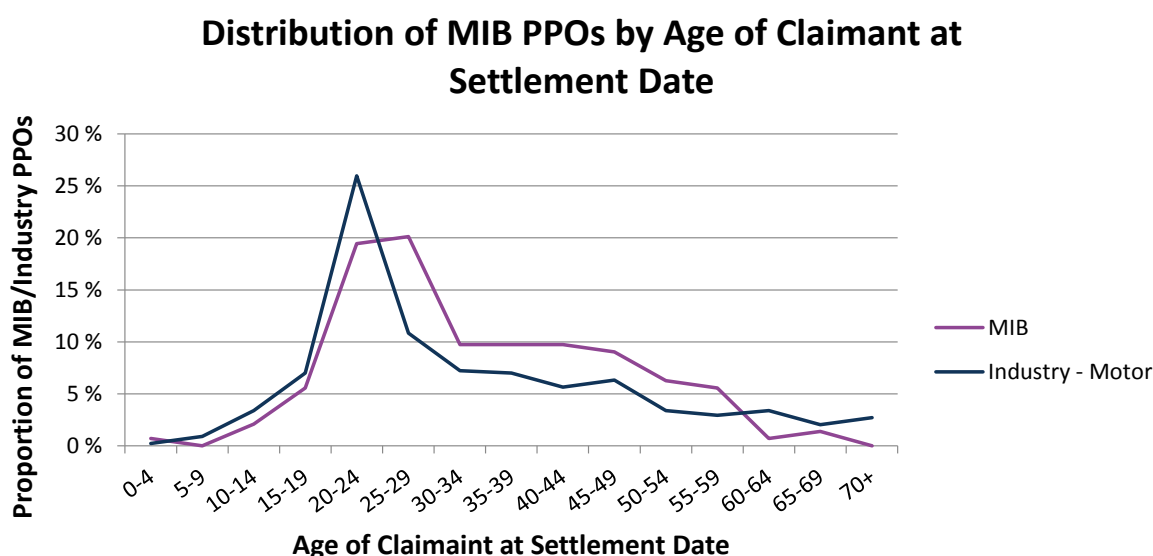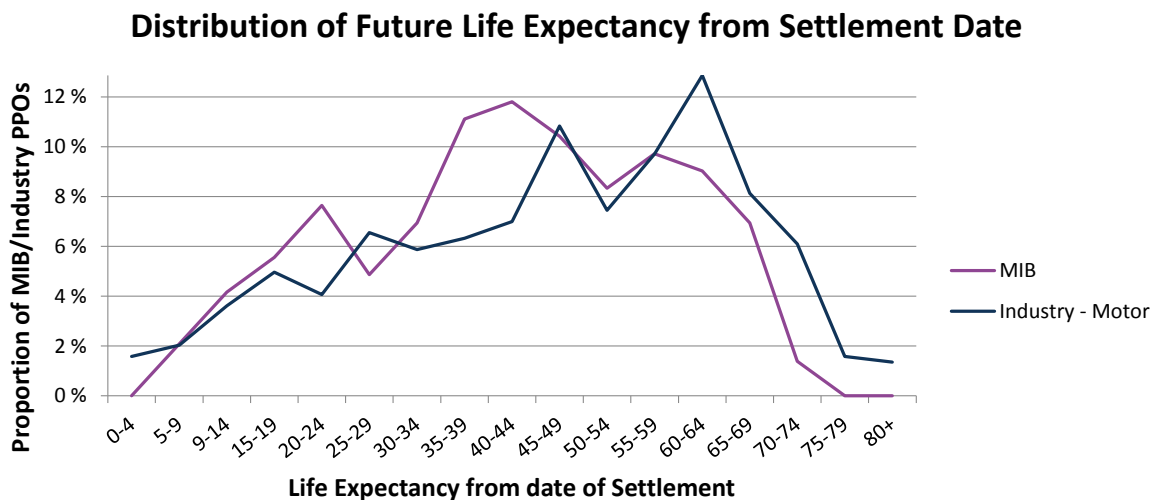

Figure 8.14: Comparison of distributions of PPOs settled by MIB/Industry by Life Expectancy from date of Settlement

It can be seen in Figure 8.15 below that the distribution of PPOs by reduction in life expectancy is higher than that of the rest of the market, this is mainly due to the high proportion of industry claimants whose reduction in life expectancy is negative. This stems from the difference in reduction of life expectancy for those claimants with brain injuries, brain injury PPOs make up two thirds of both books. This is illustrated in figure 8.16 below. This may also be as a result of the MIB having different impaired life expectancy tables compared with the market on average.

Distribution of PPOs by Reduction in Life Expectancy as % of Unimpaired
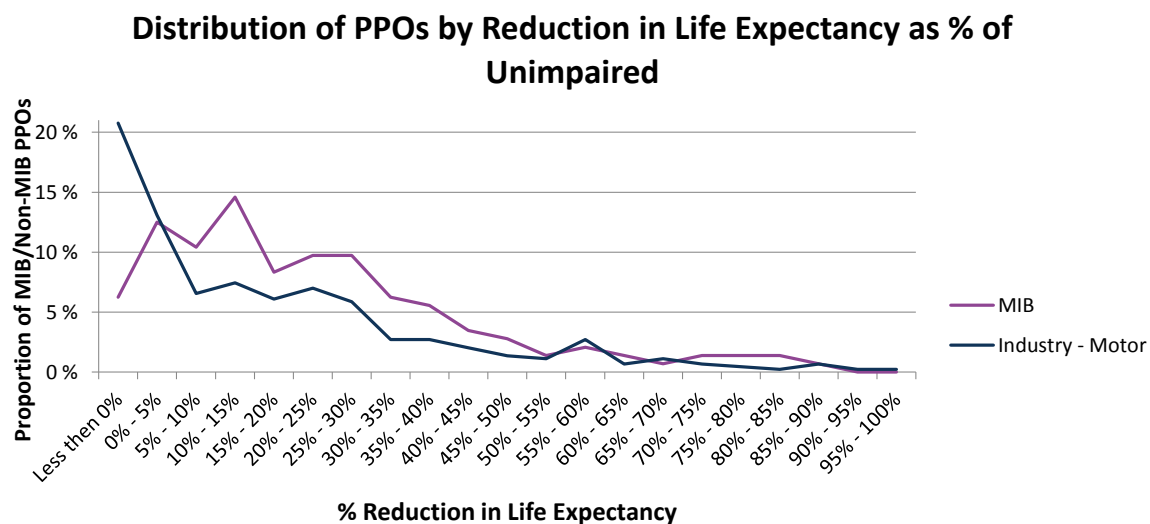
Figure 8.15: Comparison of Distributions of PPOs settled by MIB/Industry by Reduction in life expectancy as a percentage of unimpaired life expectancy

Number of Brain Injury PPOs by Reduction in Life Expectancy
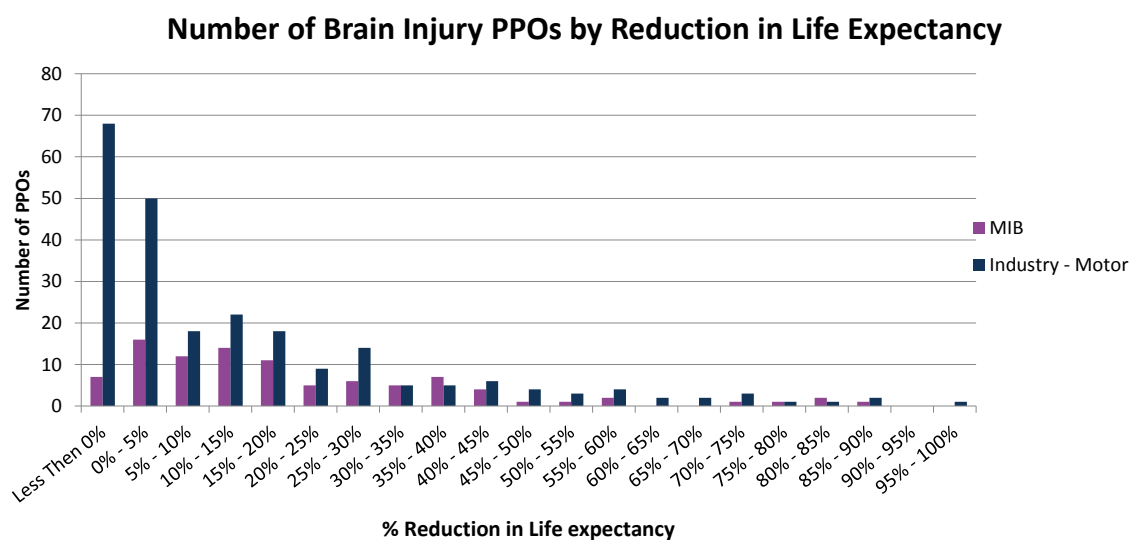
Figure 8.16: Comparison of Number of Brain Injury PPOs settled by MIB/Industry by Reduction in life expectancy as a percentage of unimpaired life expectancy

9   Longevity

While we include the results here, we wish to stress that caution should be placed on the numbers as they are from a very small sample, and materially less than a life insurer would look to use to assess mortality. Also, by construction, we will not see people living much longer than the expectations for a very long time. Hence there is an inherent bias, which is more likely to overstate mortality than understate mortality.

Within this section we have based our unimpaired mortality on the most recent ONS forecast projections (2012 based 2 way ONS Projections revised 2014) rather than using the Ogden 7 tables. The MIB data is also included in this section of the analysis.

9.1   Number of Deaths in Survey

The survey shows that there have been 29 PPO claimant deaths; 18 male and 11 female, in the period from 2006 to 2014. Figures 8.1 and 8.2 below show the number of deaths by age group for both male and female claimants. The figures also show a graph of initial exposure, which is a measure of the total number of years of exposure for PPOs in the survey (i.e. number of years from settlement to 31 December 2014 or date of death if applicable). The initial exposure has been taken from the settlement date of the PPO, as (by nature of the survey) we will only receive data for claimants who survive to settlement of the claim (and do not have information on claimants who die before a settlement).
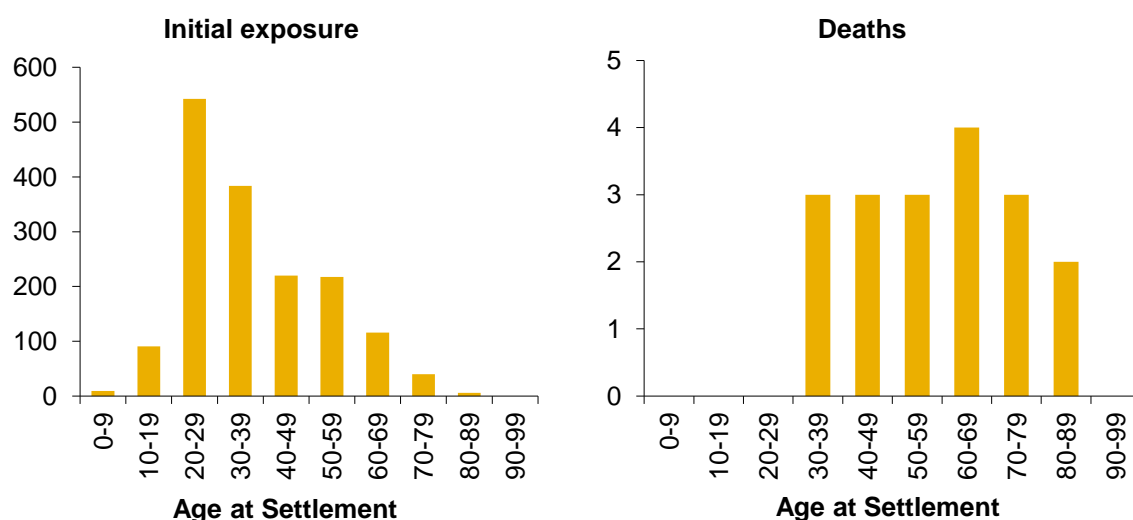
Figure 9.1: Number of male PPOs in the survey and number of male deaths in the survey
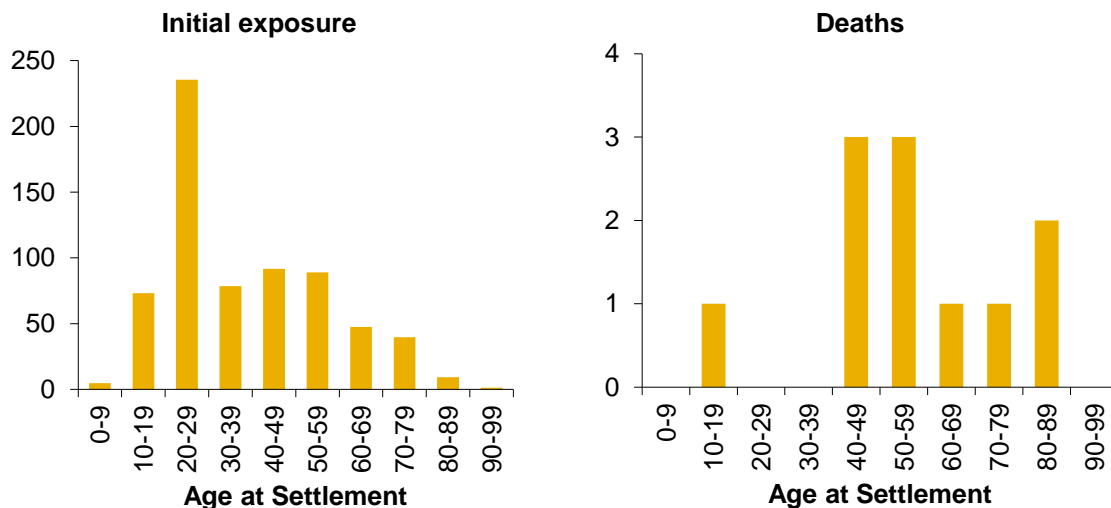
Figure 9.2: Number of female PPOs in the survey and number of female deaths in the survey

For seven of these PPO claimants, the life expectancy at time of settlement was not recorded. For the 22 cases where life expectancy was recorded, the life expectancies at the time of settlement cover a wide range of durations from 2 to 47.

There is not enough data to draw any conclusions as to whether there are any patterns as to the deaths that have occurred. However, for anyone interested Table 9.1 below shows the number of PPOs where the claimant has died by: the number of years since settlement that the claimant died, the number of years between accident and settlement, and how many years passed between the accident and death.

Number of years	Years since settlement	Delay to settlement	Years since accident
0	3	0	0
1	7	0	0
2	7	1	0
3	5	6	4
4	4	4	2
5	3	5	0
>5	0	13	23
Total	**29**	**29**	**29**

Table 9.1: Analysis of Deaths in Survey

We undertook an analysis that involved calculating the adjustment to the ONS tables, for individuals in the survey, which would be required to produce the number of deaths actually seen over the period. We have assumed that the ratio of actual to expected death rates fits to a Poisson distribution, parameterised based on the actual exposed to risk and the mortality rates from the

ONS tables. By using this method we were able to produce confidence levels around the median result.

The analysis was subject to a number of significant simplifications and assumptions, for example:

- It was assumed that the cohort was homogeneous in terms of life expectancy. We know that is very unlikely to be the case; some claimants are likely to have a very different prognosis to others as a result of their particular injuries (and lifestyles). For example, those with serious brain injury will be likely to have lower life expectancies, often significantly so, than those with moderate brain injury.

- It was assumed that it was appropriate to apply a single multiplier to the q_xs (the probability of an individual aged exactly x years will die within the next year). In fact, we do not know the shape of the mortality curve for these impaired lives; indeed the shape may well be different for different injury types. One particular impact of this may be that it is not appropriate to apply the same multiplier as derived from observing the data at this relatively early stage of the experience to future mortality rates. The reason being that, for these kinds of injuries, mortality (relative to unimpaired mortality rates) is often higher in the early years after the accident.

In addition, the analysis was conducted on a very small sample of claims over a short time period (2006 to 2014), and as such cannot be considered to be particularly credible hence **there is considerable uncertainty surrounding the results** – one additional or one fewer fatality would have a large impact on these figures. Normally pension funds would have much greater sample sizes and as a consequence have significantly narrower confidence intervals.

Table 9.2 below shows the output of the analysis. The median result suggests that the mortality rate for male PPO claimants is 3.4 times that of the general population and 4.2 times for females. This compares to 3.7 times and 4.1 times for males and females respectively in last year's survey (which did not include MIB claims). The model has output confidence intervals around these figures, although it should be noted that **we would expect the actual confidence intervals to be even broader than that shown below due to elements of model error as described above**. However the results do indicate that PPO claimants are likely to have a higher mortality rate than the general population as defined by Ogden table mortality rates, at least initially.

Percentiles	Male	Female
5th	502%	697%
25th	399%	520%
50th	**341%**	**425%**
75th	291%	347%
90th	252%	289%
95th	231%	259%

Table 9.2: Median and percentile values for the required adjustments to the ONS tables

Figure 9.3 below plots the actual number of deaths by age band against those that would have been expected for the survey sample using unimpaired mortality rates based on the ONS tables. In total there have been 29 actuals deaths, against an expected number of 7.7 deaths, representing a multiplier of 3.8 times (for males and females combined).

Actual number of deaths against expected (unimpaired lives)
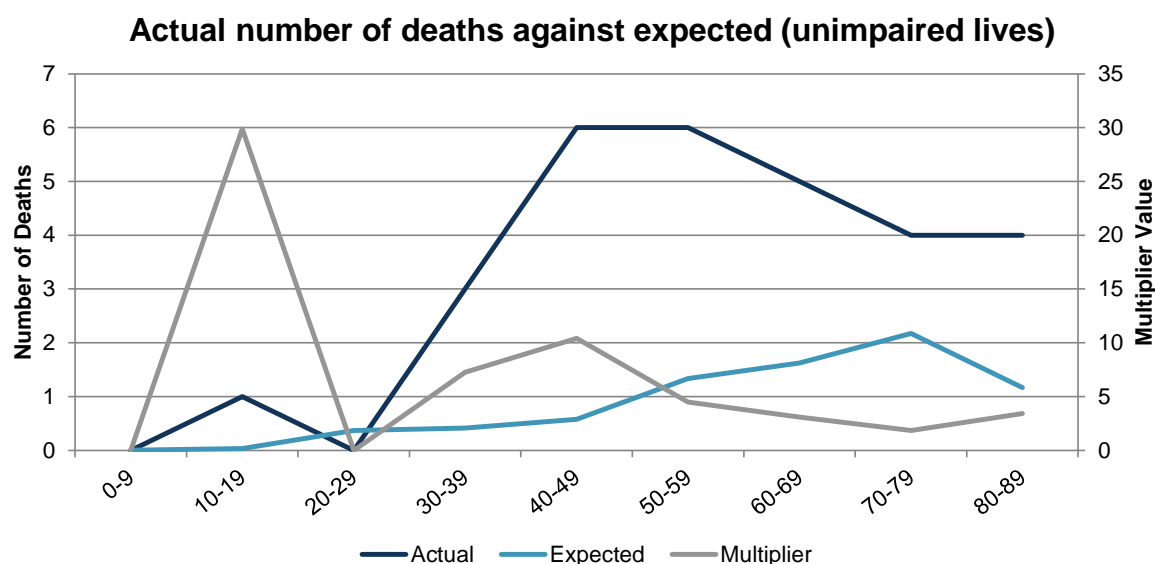
Figure 9.3: Actual number of deaths against expected (unimpaired lives)

We would encourage readers to place a limited degree of reliance on these estimates and to reference other indicators and data sources to support any assumptions they are using for their own purposes. To reiterate; we would advise readers to treat these results with caution due to:

- The small sample size

- The simplifying assumptions which have been made in the model (homogeneity of underlying mortality in the cohort and the appropriateness of a single multiplier)

- The mortality experience only being considered for those individuals who survive beyond the period it takes for their PPO claim to settle.

9.2 Comparison to Mortality Rates Assumed by Insurers in the Survey

By assuming the results of the mortality curve for impaired lives are the same as that in the ONS tables, we have converted the impaired life expectancies provided by insurers in the survey to be expressed as a mortality multiplier. A value of 100% is representative of life expectancy equal to an unimpaired life (according to the ONS tables). These results consider the range of estimates for individual claimants and hence the range of percentiles is considerably wider than the previous analysis.

Table 9.3 below shows the mortality multipliers for both male and female claimants. The median assumption in the market for males is that the impaired mortality rate is 3.4 times the unimpaired rate, for females it is 2.2 times.

Percentiles	Male	Female
5th	3330%	3792%
25th	640%	522%
50th	**337%**	**219%**
75th	177%	129%
90th	130%	99%
95th	112%	46%

Table 9.3: Median and percentile values for the impaired life expectancies as a multiplier of unimpaired life expectancies

Figure 9.4 below shows the distribution of these multipliers, it is interesting to note how skewed this distribution is in terms of how long the tail is; for example over 5% of female PPO claimants have assumed mortality rates of more than 22 times the unimpaired rate. This serves to further illustrate the point that PPO claimants are not a homogeneous group in terms of mortality.
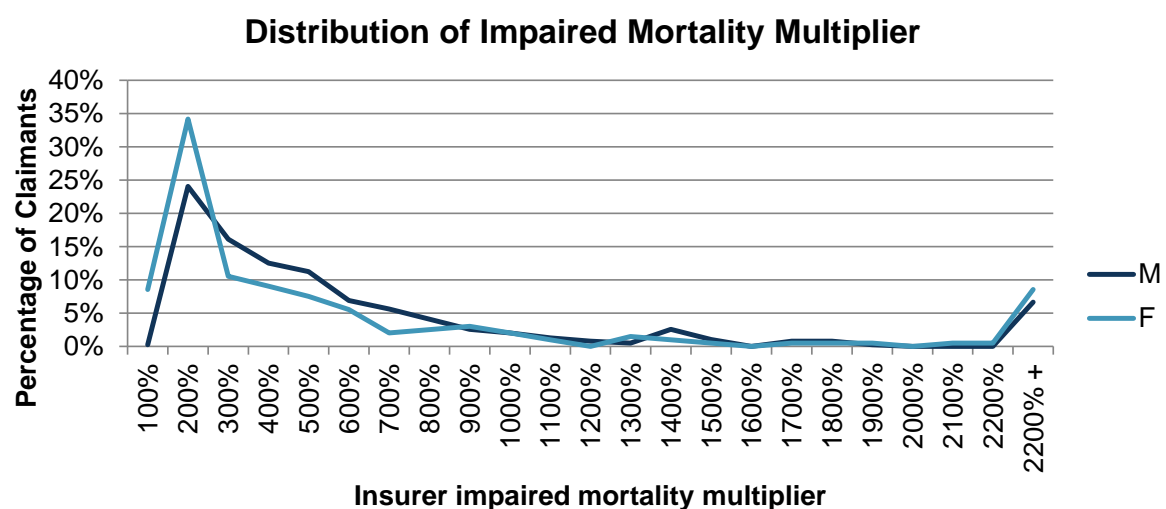
Figure 9.4: Distribution of mortality multipliers split by gender.

Table 9.4 below demonstrates how the mortality multipliers would translate to the percentage reduction in life expectancy measure for sample male and female lives aged 20, 40, and 60 in 2010.

	Male			Female		
	Age			Age		
Multiplier	20	40	60	20	40	60
200%	12%	17%	25%	11%	15%	22%
300%	20%	26%	39%	17%	24%	34%
400%	25%	33%	47%	22%	30%	43%
500%	29%	38%	54%	25%	35%	49%
750%	37%	47%	64%	32%	43%	59%
1000%	42%	54%	71%	37%	49%	66%
1500%	50%	62%	79%	44%	57%	74%
2000%	55%	67%	83%	48%	63%	79%

Table 9.4: Reduction in life expectancy to lives aged 20, 40 and 60 implied by the mortality multiplier

The results from the mortality analysis can also be expressed in terms of future life expectancy (in years). The purple dots on the graph below show the ONS unimpaired life expectancy for a 34 year old male and female (52.6 years for a male and 55.9 years for a female). We then show the 5th to 25th, 25th to 50th, 50th to 75th, and 75th to 95th percentiles of (a) the experience analysis (ie based on analysis of the number of deaths in the survey) which applies the mortality multipliers in Table 9.2 to a 34 year-old, and is shown below in navy blue, and (b) insurer assumptions of life expectancy which applies the mortality multipliers given in Table 9.3 to a 34 year-old, and is shown below in aqua.
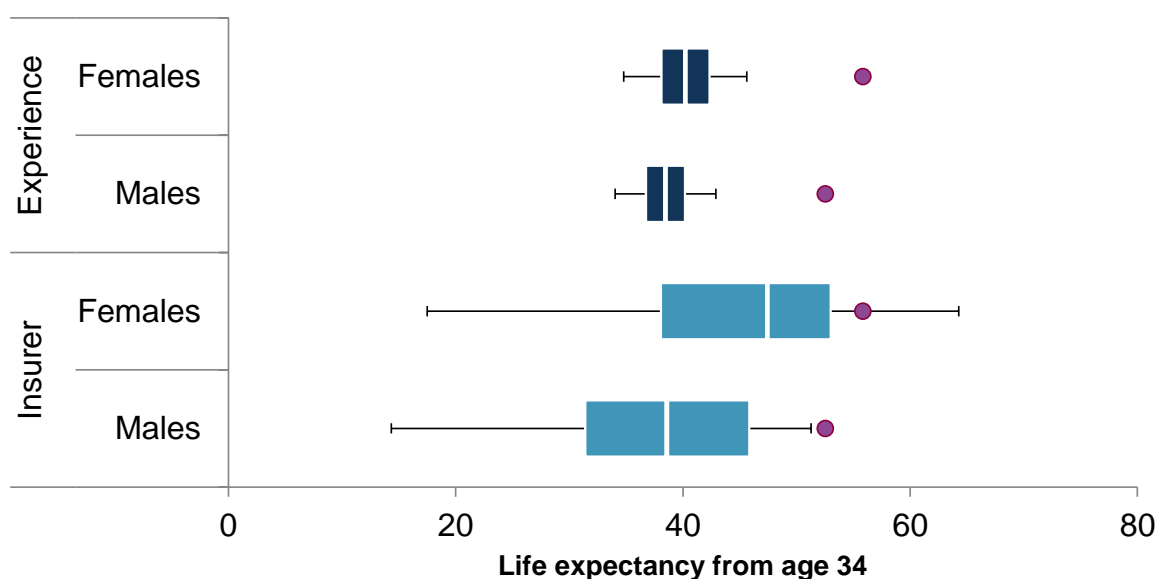
Figure 9.5: Comparison of results from Mortality analysis based on (a) mortality experience and (b) insurer assumptions of future life expectancy

This graph shows the much larger ranges of values around the insurer assumptions of life expectancy in the market compared to the analysis. This is to be expected due to the lack of homogeneity in the underlying mortality of PPO claimants and also the inconsistent approaches taken to estimating the mortality on a case by case basis (in the case of the Insurers) and by estimating the mortality on the entire cohort of PPOs (experience analysis).

It is also worth reiterating that our analysis assumes it is appropriate to apply a single multiplier to the q_xs. However it is not unreasonable to presume that for brain and spinal injuries, mortality will be higher in the early years after the injury has occurred. Consequently, as the analysis in most cases only covers an early stage of development since the accidents occurred, these results may be overstated. However, there is an average delay before settlement for these claims of six years, which would mitigate this effect to some extent.

An additional consideration is the extent to which medical enhancements may cause step changes in the longevity of claimants. Stem cell research is just one technique where progress is being made towards restoring spinal function. Widespread success of these treatments would cause a significant increase in reserves and ultimate payments, and all cedants would be correlated.

There are also general increases in life expectancy, such as better treatments for cancer etc. These have traditionally been underestimated, and while mortality tables exist in the UK which include mortality improvements, the level of improvement included should be considered with historical increases to judge possible appropriateness. What is uncertain is how much court experts will consider future longevity trends in their assessments.

9.3   Difference in Assumed Life Expectancy by Insurer

It appears that estimation of life expectancy may not be consistent from insurer to insurer. Figure 9.6 below shows the range in the different cumulative distribution of the percentage reduction in life expectancy plotted for each insurer (a couple of insurers have been excluded for data reasons). It can be seen that there are significant differences in the life expectancy distributions from insurer to insurer. At least some of this may be explained by different mixes of PPO claim types, but it appears that different approaches to the estimation of life expectancy may be taken by different insurers.

The percentage reduction in life expectancy is defined as the reduction in the claimant's life expectancy as at the time of settlement (in years, compared to an unimpaired life expectancy according to the ONS tables) as a proportion of unimpaired life expectancy as at the time of settlement (according to the ONS tables).

Some of the observed difference could be explained by differences in the nature of the claimants to each insurer. As described above, individual claimants exhibit large differences in their impairment. Due to the relatively small sample size of PPO claims, idiosyncratic impacts could cause significant differences to be observed across insurers.

In particular, brain and spinal injuries have very different survival prospects, with Section 10 showing that claimants with a brain injury are expected to live longer on average than a claimant with a spinal injury.
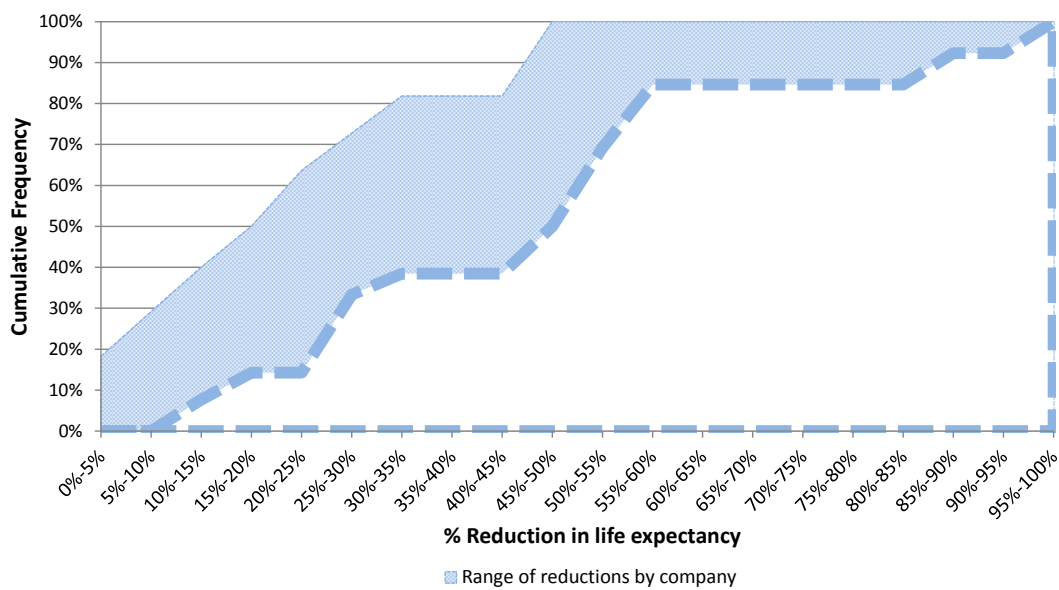
Figure 9.6: Range of difference in cumulative distribution of % reduction in life expectancy by insurer

By encouraging our contributors to use the PPO Working Party injury categorisations (described below in Figure 9.7) we hope to provide more in depth analysis regarding how mortality is affected differently by the type of injury sustained by the claimant as well as the type of care they receive. Only 4% of the PPOs we received for this survey had the categorisations attached, however we expect to see a much larger proportion of PPOs with categorisations in our next analysis.

Injury type	Code	Category	Description
Brain	B1	PVS	Permanent Vegetative State – No purposeful motor or cognitive function. Requires a feeding tube.
	B2	Cannot walk - Fed by others	Does not feed self, must be fed completely (either orally or by a feeding tube)
	B3	Cannot walk - Self feeds	Can feed self with fingers or utensils, with assistance and/or spillage
	B4	Some walking ability	Walks with support, or unsteadily alone at least 10 feet but does not balance well
	B5	Walks well alone	for at least 20 feet, and balances well
	B6	No mobility issues	
Spinal	S1	Tetraplegia Ventilator Dependent	C1-C3
	S2	High level Tetraplegia	C4-C5
	S3	Low level tetraplegia	C6-C7
	S4	High level Paraplegia	Thoracic T1-T12
	S5	Low level paraplegia	Lumbar
Spinal 2	Complete/ incomplete flag	Complete or incomplete selected	
Amputation	A1	Double upper limb	Double upper limb amputation (or loss of use), including bilateral brachial plexus injuries etc
	A2	Leg - above knee	
	A3	Leg - below knee	
	A4	Other Amputation	
Other	O1		
Care regime	**Code**	**Category**	**Description**
	C1	24/7 2 or more care ratio	24 hour care needing two or more carers for all that time
	C2	24/7 1-2 care ratio	24 hour care needing one to two carers for all that time
	C3	24/7 but night sleeper	24 hour care with at least one carer but carers can sleep at night
	C4	9 or more hours duty care a day	
	C5	5 to 8 hours duty care a day	
	C6	0 to 4 hours duty care a day	
	C7	Domestic help only, no personal care	
	C8	No regular care	

Figure 9.7: PPO Working Party injury type and care regime categorisations

10   Summary Statistics

The tables below provide summary statistics taken from all non-MIB PPOs in the survey, cumulative across all years, for the following characteristics:

• Age of claimant at settlement (years)

• Delay from accident date until settlement date (years)

• Future life expectancy at settlement date (years)

• Life expectancy reduction (years)

• Initial annual PPO Payment (summed across all heads of damage) (£ nominal)

• Lump sum payment (£ nominal)

These figures have not been adjusted for inflation and so may under-estimate the size profile of future PPOs. The average settlement date of a Non MIB PPO contained within the survey is July 2011.

10.1 Motor PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	33.8	27.8	15.8	0.9	394
Delay Until Settlement	6.5	5.7	3.3	1.3	437
Future life expectancy at settlement	46.5	48.2	19.2	-0.4	443
Life Expectancy Reduction	9.0	6.7	11.9	1.3	371
Annual PPO Payment (£)	84,333	60,000	72,420	1.6	443
Lump Sum (£)	1,770,242	1,600,000	1,085,977	1.6	441

Table 10.1: Summary statistics for Motor Non – MIB PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	32.6	25.9	15.6	1.1	286
Delay Until Settlement	6.4	5.6	3.3	1.3	315
Future life expectancy at settlement	48.1	49.2	18.3	-0.4	317
Life Expectancy Reduction	8.5	6.3	12.3	1.4	264
Annual PPO Payment (£)	82,065	59,941	73,342	1.8	317
Lump Sum (£)	1,769,220	1,600,000	1,088,809	1.6	316

Table 10.2: Summary statistics for Private Motor Non – MIB PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	36.9	33.7	16.0	0.6	108
Delay Until Settlement	6.7	5.8	3.3	1.1	122
Future life expectancy at settlement	42.3	44.1	20.8	-0.1	126
Life Expectancy Reduction	10.3	8.7	10.8	1.1	107
Annual PPO Payment (£)	90,037	67,795	69,719	1.0	126
Lump Sum (£)	1,772,825	1,600,000	1,078,779	1.6	125

Table 10.3: Summary statistics for Commercial Motor Non – MIB PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	33.6	27.8	16.2	0.8	164
Delay Until Settlement	6.1	5.4	3.0	0.9	189
Future life expectancy at settlement	45.9	47.0	18.3	-0.3	189
Life Expectancy Reduction	10.1	6.7	13.5	1.3	151
Annual PPO Payment (£)	84,683	55,202	76,188	1.8	189
Lump Sum (£)	1,779,675	1,600,000	1,042,620	0.8	189

Table 10.4: Summary statistics for Private Comprehensive Motor Non – MIB PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	29.7	24.8	13.3	1.7	51
Delay Until Settlement	7.4	6.2	3.7	1.5	57
Future life expectancy at settlement	53.8	57.0	17.5	-0.7	57
Life Expectancy Reduction	5.5	3.5	10.1	0.0	42
Annual PPO Payment (£)	79,128	71,000	63,347	2.2	57
Lump Sum (£)	1,601,941	1,400,000	814,118	0.7	57

Table 10.5: Summary statistics for Private Non-Comprehensive Motor Non – MIB PPOs

10.2 Liability PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	46.4	50.5	15.4	-0.5	45
Delay Until Settlement	6.3	4.5	6.8	5.2	48
Future life expectancy at settlement	30.2	27.7	14.5	0.7	50
Life Expectancy Reduction	12.0	8.7	14.2	2.4	45
Annual PPO Payment (£)	72,672	50,000	66,215	1.5	50
Lump Sum (£)	1,524,846	1,155,045	1,197,699	1.5	49

Table 10.6: Summary statistics for Liability Non – MIB PPOs

10.3 PPOs by injury

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	34.0	27.7	16.0	0.9	325
Delay Until Settlement	6.8	5.9	3.4	1.1	357
Future life expectancy at settlement	47.8	51.8	19.3	-0.4	370
Life Expectancy Reduction	7.3	4.3	12.4	2.0	304
Annual PPO Payment (£)	78,042	55,000	66,736	1.7	370
Lump Sum (£)	1,604,679	1,418,705	1,039,362	1.7	368

Table 10.7: Summary statistics for Brain injury Non – MIB PPOs

	Mean	Median	Standard Deviation	Skewness	Sample Size
Age at settlement	39.5	35.3	18.0	0.5	106
Delay Until Settlement	4.7	4.6	2.1	1.9	106
Future life expectancy at settlement	35.4	35.3	16.4	0.1	113
Life Expectancy Reduction	13.8	12.7	9.4	1.0	104
Annual PPO Payment (£)	108,557	78,750	89,268	1.2	113
Lump Sum (£)	2,205,829	2,012,500	1,141,522	1.4	112

Table 10.8: Summary statistics for Spinal injury Non – MIB PPOs