GIRO Conference and Exhibition 2012
Juggling uncertainty – the actuary’s part to play
Actuarial Bright Green
R148  G166  B31
Actuarial Slate
R32  G44  B52
Secondary Olive Green
R120  G162  B47
Secondary Bottle Green
R0  G147  B127
Secondary Turquoise
R0  G138  B176
Secondary Aqua Blue
R26 G160  B170
Secondary Pastel Green
R126  G205  B195
Secondary Light Purple
R123  G149  B174
Secondary Purple
R97  G107  B156
Secondary Ecru
R186  G163  B171
Secondary Yellow
R215  G176  B18
Secondary Orange
R213  G135  B43
Secondary Red
R238  G52  B36
Secondary
Rubine
R226  G1  B119
*This colour reference is for screen presentations only
Disclaimer

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This document supports the research effort of the Actuarial Profession's working party and is not written advice directed at the particular facts and circumstances of any given situation and/or data.

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

- Third iteration of the Actuarial Profession’s Third Party Working Party, which investigates third party motor claims (injury and property damage)
- Scope this year focused on private car comprehensive business, with a more granular analysis of geography
- At £8.5bn earned premium for 2011, greater volumes of data than ever before:
  - Data from new contributors representing an extra £2.1bn in earned premium for 2011
  - Significant increase in number of contributors since last year, including new FSA and FSC (Gibraltar) regulated companies
  - Analysis of geography now supported by data at postcode sector level
  - Data collected, processed and analysed in aggregate by Towers Watson
Third Party Working Party

• Initial results presented at June Reserving Seminar and Pricing Seminar:
  – Market statistics and accident year trends, with commentary from the Working Party
  – Analysis of regional experience
• Further potential results to be presented at GIRO:
  – Analysis of individual bodily injury claims data
  – Ancillary analysis from publicly available sources
  – Data questionnaire
  – Implications for the PPO working party results
• Data is provided as at 31 December 2011
• But the focus of today’s workshop will be Small Bodily Injury Claims
Acknowledgements

Working Party:
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LV=
MMA
NFU
Provident
RSA
Tesco Underwriting
The Co-operative Insurance
Zurich

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   d. How weak/strong are case estimates?
   e. What changes has MOJ brought about?
5. Conclusions
Data
Market statistics

• Third party injury (TPI) claims have been “capped” at £50,000 (1999 money, indexed at 7% pa) to remove the distorting effect of very large claims

• Inflation rates quoted in the charts give the latest position of the relevant accident year divided by the equivalent position of the previous year (for example, the 2011 accident year position after 12 months of development divided by the 2010 accident year position after 12 months of development)

• Because not every contributor provided every data item, not every chart and statistic in this analysis is based upon data from the full set of contributors. This can result in minor inconsistencies between charts.

• Data has been checked for consistency but has not been independently audited
Data
Market statistics

• The collection of contributing insurers has changed materially over the years. For example relative to last year’s study it includes four new insurers.

• Each year it is common for a number of insurers to make relatively subtle changes to their definitions of claim statistics. In the aggregate, these lead to distortions when comparing the market studies between different years.

• Not all contributors are able to supply data to support every claim statistic in each study. There are generally improvements (but not always) in the availability of data from year to year, and as such, the results of the most recent study will be based upon data from an increased proportion of the contributor companies (and not just new contributors). Again, this introduces a material distortion into any analysis which attempts to compare the results across different studies.

• It is reasonably common for insurers to restate the claims statistics of prior accident years (and prior periods of development), particularly in the case where portfolios (including movements on prior year liabilities) have been acquired or disposed of by the contributor(s) in question. Other reasons for such changes can be changes in the availability of granular data pertaining to (potentially large) segments of portfolios (such as in the case where data is provided by bordereaux rather than being integrated in insurer administration systems) or in some cases changes in the mapping of data to classes.

• For this reason, we would recommend that if the user of the research wishes to understand how trends have evolved over time, then they should focus on looking at trends by accident year within the latest study, rather than attempting to compare the results across studies.

• Likewise we do not consider statistically valid any back engineering of individual contributors’ contributions.
Data
State of Health of Market Statistics

Questionnaire
• Following the initial data collection exercise, it became apparent that the breadth of data available from contributors was less than desired
• The Working Party issued a data questionnaire asking contributors to assess the availability of 13 desired data items, and if unavailable, whether there were plans to capture this data.
• Contributors were asked to comment on claims handling systems and actuarial systems separately.
• The results from the 10 respondents are shown on the Appendix but summarised here.

Results
• Claims Handling Systems capture the majority of the additional data items, with the exception of PPOs
• Actuarial Systems are not generally extracting these additional data items
• Actuarial Systems need to be enhanced to monitor changing claims environment (e.g. MoJ process) and to be able to provide enhanced support to the business
• Whilst some data items are not currently available (classified as red), some companies have developed ad-hoc or manual data feeds to monitor this data
Data
Claim Management Companies

- CMC analysis is based upon data extracts on 3 dates June 2010, June 2011 and March 2012, i.e. census data. From this transactional data has been inferred by interpolation between census points.

- If the status of a CMC has changed prior to the first census then interpolation cannot be used:
  - Eg if at first census in 2010 we know that CMC 12345 cancelled its authorisation on 01/03/2009 we cannot tell its date of first authorisation.

- However the CMC registration number (which follows a sequential pattern) has been used to infer a start date.
  - Eg if we know that CMC 12344 was first authorised on 01/02/2008 and CMC 12346 first authorised on 03/02/2008 we can reasonably assume CMC 12345 was authorised on 02/02/2008.
Data
CRU

- CRU data records claimant counts (not claim counts)
- It is recorded for the purposing of recovering DWP benefits, and we understand (from the CRU) that average costs do not include any NHS recoveries.
- It is, however, obligatory for each TPI claimant to be counted
Data
Police statistics

• The Road Traffic Act 1991\(^\text{^},\) defines the duty of the public to report a personal injury road accident on a public road involving at least one motor vehicle (unless details such as insurance documents, name, etc. are exchanged between drivers).

• Stats19 is a set of data collected by a Police Officer when a road accident involving an injury or death occurring on a public road is reported (within 30 days of occurrence).

• Non-motor vehicles such as pedal cycles and ridden horses are reported regardless of motor vehicle or pedestrian involvement. Thus, Stats19 road accidents are defined wider than under the Road Traffic Act.

• Casualties per road accident as measured by Stats19 can be viewed as a proxy for the ratio of claimants per injury claim.

• The Department for Transport acknowledged in their 2008 report that a considerable proportion of non-fatal casualties are not reported to the police.

• In addition consistency in time in the data collection can not be guaranteed.

\(^{^\text{^}}\)Road Traffic Act 1988, s 170 amended by the Road Traffic Act 1991, Sch 4
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5. Conclusions
Scene Setting
High Level Market Claims Data

- The chart shows that the frequency of reported bodily injury claims has started to increase again in 2011 having, to some extent, plateaued during 2010.
- Was 2010 an anomalous year?
- Has 2011 resumed the previous trend or is it the “final fling” before referral fees are banned.
Scene Setting
High Level Market Claims Data

- The frequency of reported TPD claims continues to decrease
- Increase in the gradient could be due to increase in petrol prices
Scene Setting
Types of Injury

Examples of types of injury falling into various claim band sizes - bodily injury claims up to £100k

- The following are broad guidelines only. The assessment of any injury depends on the actual circumstances of an individual incident / claimant. The figures below are per claimant, include general damages and solicitor costs, but exclude any special damages.

- Up to £1k:
  - Minor soft tissue and whiplash injuries, fully resolved within a few weeks.
  - Low level travel anxiety.

- Over £1k & up to £10k:
  - Moderate soft tissue and whiplash injuries, complete recovery to nuisance levels within a few years.
  - Simple fractures – i.e. tibia or fibula with complete recovery (dependant on healing time / age etc).
  - Damage to teeth – loss of one to several front teeth.
Scene Setting
Types of Injury

- **Over £10k & up to £20k:**
  - Moderate psychiatric damage, depending on length and extent, but generally improved within several years.
  - Serious fractures – eg. one or both forearms where there is significant permanent residual disability.
  - Scarring.
  - Minor / moderate hand injuries.

- **Over £20k & up to £50k:**
  - Severe soft tissue injury, permanent damage, significant disability.
  - Serious hand, foot, leg injuries.

- **Over £50k & up to £100k:**
  - Minor to moderate head injuries – eg. brain damage, concentration and memory affected, ability to work is reduced, small risk of dependence on others.
  - Severe post traumatic stress disorder.
  - Facial injuries – eg. significant scarring, disfigurement and psychological reaction.
  - Amputation (loss of 1 arm or 1 leg or 1 foot or 1 hand).
Scene Setting
Legislation and the Market

- Motor environment is evolving fast: but with tailwinds as well as headwinds
  - Gender Directive
  - Solvency II
  - Low investment returns
  - Fuel prices and the cost of motoring
  - Market premium increases unwinding (1)
  - But still CORs above 100%
  - PPOs and review of Ogden discount rate
  - MoJ - extension of process, review of fees
  - LASPO Act (banning of referral fees)
  - Whiplash consultation, increase to SCT
  - OFT enquiry on credit hire / repair
  - Simmons v Castle - general damages up 10%

FSA returns for 2011 show a net COR of 106% and a loss ratio of 78% for 2011 (2)

- Our study covers the cost of third party claims which cover 70% of Motor Insurance claims costs – the OFT figures cite TPI – 50%, other TPD = 20% (3).

- Focus of working party (Third Party) is therefore on the most analytically problematic and the most material areas of cost and provides information to help actuaries, consumers, regulators and companies make informed decisions

Sources
1. Confused.com/Towers Watson Insurance Price Index shows Private Comp rates dropped by 7.1% in 12 months to end June 2012
2. Deloitte Analysis of AM Best data
Legislative Developments
Ogden Discount Rate

• The current discount rate of 2.5% was set in June 2001 by reference to the yield on Index-Linked Government Stock (ILGS) over the previous three years.
  – The approach used in 2001 would now lead to a discount rate of c.1%.
• Under pressure from claimant solicitors, Lord Chancellor Kenneth Clarke agreed to review the discount rate.
• The Ministry of Justice has now issued a consultation on the methodology used to set the discount rate. This asks for views on two possible bases
  1. An approach based on recent ILGS yields, similar to that used in 2001;
  2. An approach based on a mixed portfolio of investments
• This consultation closes on 23rd October. But further new consultation has recently been announced, to be issued in Autumn 2012, on “whether the restrictions on the factors that can be taken into account in prescribing a rate” ... “are still appropriate.”
• The new Lord Chancellor, Chris Grayling, will then have to consider the responses, decide on an appropriate methodology and consult further (at least with the Government Actuary and the Treasury) before making any announcement.
  – This means that the discount rate is unlikely to change before mid-2013 at the earliest
• Any reduction in discount rate would increase the cost of settling large personal injury claims.
  – It could also increase the attractiveness to claimants of lump sum awards relative to PPOs
  – A period of uncertainty before the setting of a new rate could lead to delays in settlement of large claims.
  – In insurance, this would impact Motor Liability and Commercial General Liability (EL/PL), but also MOD and NHS settlements
Legislative Developments
MoJ Process

- The Ministry of Justice wrote to interested parties in February 2012 inviting views on its plans to extend the existing MoJ process for road traffic accidents to cover claims up to £25,000.
- The then Justice Minister Jonathan Djanogly indicated to Parliament that changes would take effect in April 2013.
  - However, there has been no formal confirmation that this extension will take place or when.
- The Ministry also sought views on a possible reduction in the level of fixed recoverable costs for MoJ claims.
  - Many consider that a reduction in recoverable costs (both for MoJ claims and under the predictable costs regime) is a natural corollary of the ban on referral fees.
Legislative Developments
LASPO Act

- The Legal Aid, Sentencing and Punishment of Offenders Act received Royal Assent in May 2012.
- It is expected to come into force in April 2013.
- LASPO introduces many of the reforms proposed by Lord Justice Jackson in his review of civil litigation costs.
- The Act will
  - Ban referral fees for personal injury claims
  - Make success fees and After-the-Event legal expense insurance premiums unrecoverable from the liable insurer
  - Introduce Damages Based agreements (whereby claimant solicitors take a percentage of any damages awarded)
- The introduction of Qualified One-Way Costs Shifting, also proposed by Jackson, is not included in LASPO but is widely expected to be introduced by an amendment to the Civil Procedure Rules from the same time.
  - This would mean that (other than in exceptional circumstances) an unsuccessful claimant would not be liable for the defendant’s costs, negating the need for legal expense insurance.
Legislative Development
General Damages

- Lord Justice Jackson recommended in his report that awards of general damages should be increased by 10% to compensate claimants for the non-recoverability of success fees and ATE premiums (introduced in the LASPO Act).
- The Court of Appeal used the case of Simmons v Castle to announce that general damages awards made from 1st April 2013 would be increased by 10%, in line with Jackson’s recommendation.
- This would create a mismatch of timing, with success fees and ATE premiums still recoverable for agreements entered into before April, but general damages increased if the claim is subsequently settled after April.
- It is also likely that this would cause delays in settlement of claims before April, with claimant solicitors holding out for a higher award if the claim remains open until then.
- The ABI applied to the Court to intervene in this case and the Court agreed to listen to submissions both from the ABI and from the Association of Personal Injury Lawyers. The date for this hearing has been provisionally set for 25th September.
Legislative Developments
Other developments

• The Government is expected to issue a consultation paper shortly on options to reduce whiplash claims.
  – Possible options include raising the small claims track limit for injury claims from £1000 to £5000. This would mean that legal costs would not be recoverable for the majority of whiplash claims.
  – Another possible measure is to establish an independent panel of medical experts to diagnose whiplash injuries rather than relying on GPs.
• The Office of Fair Trading recently completed a review into credit hire and repair.
  – Its report was published in May and found that dysfunctional practices within the insurance industry added £10 to the average cost of a motor insurance policy.
  – The OFT was provisionally minded to refer the matter to the Competition Commission. It will make a final decision on whether or not to make a referral in October.
Motor Premium Rate Movements
Confused.com/Towers Watson Car Insurance Price Index

Quarterly price movements

- Average prices across the UK have fallen by 2.3% in the second quarter, contributing to a 7.1% decrease in the last 12 months
- For the third quarter out of the last four, prices for comprehensive insurance fell, having been flat in the final quarter of 2011

Source: Confused.com / Towers Watson Car Insurance Price Index July 2012
Scene Setting
Vehicle Mileage & Petrol Price

Vehicle mileage source: http://www.dft.gov.uk/statistics/series/traffic
Petrol price source: http://www.speedlimit.org.uk/petrolprices.html
Scene Setting

CRU Data

Number of motor cases registered to the Compensation Recovery Unit has increased in each year correlating broadly with TPWP TPI data

• The number registered in the 2011-12 financial year was 5% higher than in the previous year, the lowest recent level of year-on-year growth, but follows a 17% increase last year and sits in the context of a long term 10% trend

• This is based on registration so may reflect an element of speeding up in 2010.
Scene Setting
Police Statistics

- Police statistics show a decreasing number of injuries against market TPI frequency increases

*This data supports a view that TPI frequency inflation is more related to claiming behaviour than any change in the underlying risk*

Police vs Market data

Source: STATS19

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Scene Setting

CMC Data

Key

- TPWP estimate of count of CMCs.
- TPWP data extraction periods.
- Count of CMCs from MoJ annual report.

• Claim Management Companies: slightly fewer but more activity (+52% in 2010; + 21% in 2011)

<table>
<thead>
<tr>
<th>Year to Nov</th>
<th>CMC £m</th>
<th>YoY Turnover</th>
<th>YoY % inc</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
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<td></td>
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<tr>
<td>2009</td>
<td>247.5</td>
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<td>52%</td>
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<tr>
<td>2010</td>
<td>377.0</td>
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<tr>
<td>2011</td>
<td>455.4</td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>2012</td>
<td></td>
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</tr>
</tbody>
</table>

Count of authorised Personal Injury CMCs
(showing comparison of TPWP and MoJ figures)

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### Scene Setting

#### Weather

- TPD and TPI are impacted by seasonality and by unusual weather.

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<td>2006</td>
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<tr>
<td>2007</td>
<td><img src="image" alt="Storm" /></td>
<td><img src="image" alt="Unusual Rain" /></td>
<td><img src="image" alt="Flooding" /></td>
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<tr>
<td>2008</td>
<td></td>
<td><img src="image" alt="Unusual Rain" /></td>
<td><img src="image" alt="Flooding" /></td>
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<tr>
<td>2009</td>
<td><img src="image" alt="Snow/Ice" /></td>
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<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
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<td><img src="image" alt="Storm" /></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- = snow / ice
- = unusual rain
- = flooding
- = storm
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Summary of Published Findings (June 2012)
Claim frequency

Private Car Comp - TPD
Reported Claim Frequency (inc nils)

While TPD frequency decreased by 11%

Inflation Rates
10-11: -11.2%  09-10: -5.5%  08-09: -0.2%  07-08: -6.6%  06-07: 1.9%
Summary of Published Findings (June 2012)
Claim frequency

Private Car Comp - TPI
Reported Claim Frequency (inc nils)

• TPI frequency increased by 5%
• 2010 is deteriorating

Inflation Rates
10-11: 4.7%  09-10: 0.7%  08-09: 9.5%  07-08: 4.8%  06-07: 8.5%
Summary of Published Findings (June 2012)
Ratio of TPI to TPD claim numbers

Private Car Comp
Reported Claim Numbers (inc nils) - TPI/TPD Ratio

Inflation Rates
10-11: 17.7%  09-10: 6.9%  08-09: 10.9%  07-08: 12.4%  06-07: 7.5%

The market TPI / TPD ratio increased by 18% in 2011
Summary of Published Findings (June 2012)
Conclusions for 2011

- A dramatic 11% drop in TPD frequency; the highest level of average cost inflation on TPD since 2006
- Slowing down in TPD settlement and increase in case estimate strength / size
- Huge increase in the percentage of accidents with TPI
- Despite an 11% drop in TP accidents, TPI frequency is still up by 5% with TPI/TPD inflation at 18%
- Both TPI/TPD frequency inflation and views on incurred severity inflation are consistent with 2010 being anomalous with 2011 showing a catch up with 2 years inflation in one. Capped TPI inflation appears to have taken off again to previous levels after a (6-9%) increase relative to 2010, potentially resuming its annualised trended rate of 6% with a speeding up in settlement and payment, potentially due to MOJ
- Any increases or decreases in TPD frequency flow through to TPI inflation. Norming to zero TPD frequency inflation (-11% in 2011), the data supports a trended view of TPI burn cost inflation in excess of 15% unless one believes that the lower settlement cost inflation will continue.
- These key alternative hypotheses will be investigated further with new data which splits the capped TPI claims into size bands for GIRO
- However for the moment, the most plausible hypothesis would appear to be that 2010 was a benign anomaly and 2011 has had both its own natural inflation and the “missing inflation” from 2010.
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## Questions and Hypotheses (to be answered later)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Our Prejudices</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. What is small TPI inflation?</td>
<td>• &gt; 15% on burn cost norming for TPD distortions driven by small (MOJ type) claims with single and multiple claimants</td>
</tr>
</tbody>
</table>
| b. 2011 – catch up or new trend?              | • Catch Up with 2010 experience driven by  
  i. Anomalous weather  
  ii. fewer accidents due to lower vehicle mileage  
  iii. MOJ changes disrupting CMCs?  
  • No further adverse development on i, ii; but potential for this on iii with “back-farming”                                                                                                                                                                                                                                                                                                                  |
| c. What do we know about multi-claimant claims? | • c. 1.5 claimants per claim with 5% pa inflation: claimant per claim inflation ~ freq inflation                                                                                                                                                                                                                                                                                                                                                                               |
| d. How weak/strong are case estimates?         | • Case estimates were identified as weak in our 09/10 work; they have strengthened but are still a concern                                                                                                                                                                                                                                                                                                                                                                     |
| e. What’s changed post MOJ?                    | • Simple whiplash claims settling faster and same cost                                                                                                                                                                                                                                                                                                                                                                                                                    |
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Introduction

- This presentation summarises the data trends for the TPWP analysis of capped bodily injury claims in a series of 5 indexed layers.
- The layers are given in 2010 money, indexed at 7% pa for other accident years:
  - 0 to £1k
  - £1k to £10k
  - £10k to £20k
  - £20k to £50k
  - £50k to £100k
- Large TPI claims will be covered at the Reserving Plenary.
Introduction

Graph terminology

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

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

• Using the Type 2 definition, a claim of £15,000 from accident year 2010 contributes:
  – £15k to Layer 3 (£10k – £20k)
  – £0 to all other layers

• The chart shows the projected total TPI burning cost split by layer using Type 2 definition.

• In this presentation, any charts which use this definition will be accompanied with a version of this graphic. Shading represents the portion(s) of the claim that is relevant to the given statistic.
Capped bodily injury
Projected Results (Type 1 – incl capped component of excess claims)

Projected Ultimate Capped TPI Results for Private Car Comprehensive

<table>
<thead>
<tr>
<th>Accident Period</th>
<th>Earned Exposure (millions of policy years)</th>
<th>Ultimate Capped Claim Frequency (claims per million vehicle years)</th>
<th>Ultimate Capped Claim Severity (£000s)</th>
<th>Ultimate Capped Burning Cost (£)</th>
<th>Year-on-Year Change in Frequency (% pa)</th>
<th>Year-on-Year Change in Severity (% pa)</th>
<th>Year-on-Year Change in Burning Cost (% pa)</th>
</tr>
</thead>
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<tr>
<td>2004</td>
<td>9.80</td>
<td>8,526</td>
<td>6,397</td>
<td>54.5</td>
<td>15.9%</td>
<td>-6.9%</td>
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<td>2005</td>
<td>10.76</td>
<td>9,879</td>
<td>5,956</td>
<td>58.8</td>
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<td>12.58</td>
<td>10,639</td>
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<td>64.5</td>
<td>5.4%</td>
<td>2.3%</td>
<td>13.8%</td>
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<td>2007</td>
<td>13.03</td>
<td>11,843</td>
<td>6,201</td>
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<td>8.3%</td>
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<td>12.5%</td>
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• Alternate years have shown High/Low frequency Inflation at 8% over the period
• Severity inflation has been higher since 2008 averaging 8% (10% excluding 2010 which was benign; but 6% in the post MOJ years)
• Burn cost inflation has averaged 14% since 2008 (18% excluding 2010; but 10% in the post MOJ years), with periods with 2009 and 2011 particularly high.
Capped bodily injury
Projected Results (Type 2)

Most claims are in bottom two layers; but most of cost comes from middle 3 layers

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

<table>
<thead>
<tr>
<th>Accident Year</th>
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<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
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<td>Frequency</td>
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<tr>
<td>(claims per million policy years)</td>
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<td>651</td>
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<td>5,858</td>
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<td>(£)</td>
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</table>

Most claims are in bottom two layers; but most of cost comes from middle 3 layers.
Capped bodily injury
Projected Results (Type 1)

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa)

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>£0 - 1k</th>
<th>£1k - 10k</th>
<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
<th>&lt; 100k</th>
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</thead>
<tbody>
<tr>
<td>Frequency (in layer and above) (claims per million policy years)</td>
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<td>202</td>
<td>11,843</td>
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<td>4.8</td>
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<td>8.4</td>
<td>4.7</td>
<td>58.84</td>
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### Capped bodily injury

**Projected Results (Type 1)**

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa) - Implied % Change

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<th>£0 - 1k</th>
<th>£1k - 10k</th>
<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
<th>&lt; 100k</th>
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<tr>
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<td>14%</td>
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<td>-7%</td>
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<tr>
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<td>1%</td>
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<tr>
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<td>4%</td>
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<td>17%</td>
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<tr>
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<table>
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<th>Last 4 (Excl 2010)</th>
<th>Last 2</th>
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<td>16%</td>
<td>6%</td>
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<td>8%</td>
<td>7%</td>
<td>10%</td>
<td>6%</td>
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<th>Last 2</th>
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<tr>
<td>2007</td>
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<td>7%</td>
<td>4%</td>
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<th>Last 4 (Excl 2010)</th>
<th>Last 2</th>
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<tr>
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<td>14%</td>
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</tr>
<tr>
<td>2011</td>
<td>12%</td>
<td>10%</td>
<td>10%</td>
<td>8%</td>
</tr>
</tbody>
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**Frequency**

- Impacted by TPD frequency – Slide 42
- Inflation is volatile but has been reducing overall and for Band 2, averaging 8-9% across all years, 6-7% (2008-2011)
- Inflation has been increasing for layers 3&4 with higher volatility, averaging 5%, or 8-9% (2008-2011)
- Inflation is broadly flat for layer 5 averaging 0%, or 2% (2008-2011)
- Frequency inflation is more volatile for layers 3 and above
Capped bodily injury
Projected Results (Type 1)

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa) - Implied % Change

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>£0 - 1k</th>
<th>£1k - 10k</th>
<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
<th>&lt; 100k</th>
</tr>
</thead>
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<tr>
<td>2004</td>
<td>16%</td>
<td>14%</td>
<td>3%</td>
<td>7%</td>
<td>-9%</td>
<td>16%</td>
</tr>
<tr>
<td>2005</td>
<td>8%</td>
<td>7%</td>
<td>3%</td>
<td>1%</td>
<td>-5%</td>
<td>8%</td>
</tr>
<tr>
<td>2006</td>
<td>11%</td>
<td>11%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td>2007</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
<td>-3%</td>
<td>5%</td>
</tr>
<tr>
<td>2008</td>
<td>10%</td>
<td>12%</td>
<td>16%</td>
<td>17%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>2009</td>
<td>2%</td>
<td>3%</td>
<td>8%</td>
<td>12%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>2010</td>
<td>6%</td>
<td>7%</td>
<td>16%</td>
<td>21%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>2011</td>
<td>8%</td>
<td>9%</td>
<td>5%</td>
<td>4%</td>
<td>-1%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Severity

- Inflation overall is volatile overall but averages 4%, increasing in 2008, since when it has averaged 8%. The post MOJ years show average inflation at 6%
- The increases in overall severity inflation is driven by increases in each of layers 1-3 in 2008
- The potentially lower inflation post MOJ is driven by layers 2-3
- Layer 5 is either volatile or has increased since 2010
### Capped bodily injury

**Projected Results (Type 1)**

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa) - Implied % Change

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>£0 - 1k</th>
<th>£1k - £10k</th>
<th>£10k - £20k</th>
<th>£20k - £50k</th>
<th>£50k - £100k</th>
<th>&lt; £100k</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>16%</td>
<td>14%</td>
<td>3%</td>
<td>7%</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>2005</td>
<td>8%</td>
<td>7%</td>
<td>3%</td>
<td>1%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>2006</td>
<td>11%</td>
<td>11%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>11%</td>
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<tr>
<td>2007</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>2008</td>
<td>10%</td>
<td>12%</td>
<td>16%</td>
<td>17%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>2009</td>
<td>2%</td>
<td>3%</td>
<td>6%</td>
<td>12%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>2010</td>
<td>6%</td>
<td>7%</td>
<td>16%</td>
<td>21%</td>
<td>13%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Frequency % Change**

- All: 8% 9% 5% 4% -1%
- Last 4: 6% 7% 8% 8% 2%
- Last 4 (Excl 2010): 7% 9% 13% 16% 6%
- Last 2: 4% 5% 4% 3% 2%

**Average Cost % Change**

- All: 8% 9% 5% 4% -1%
- Last 4: 6% 7% 8% 8% 2%
- Last 4 (Excl 2010): 7% 9% 13% 16% 6%
- Last 2: 4% 5% 4% 3% 2%

**Burn Cost**

- The combination of frequency and severity, on a higher level since 2007, when it has averaged 14%. Since 2010 it has averaged 10%, but it remains to be seen if this is a new trend or an outlier.

- Although differing in detail in frequency and severity, overall patterns of inflation are not dissimilar in shape across all layers.

### Burn Cost

- **Average Cost % Change**
  - All: 6% 9% 7% 5% 7%
  - Last 4: 8% 6% 8% 5% 8%
  - Last 4 (Excl 2010): 8% 7% 9% 5% 6%
  - Last 2: 8% 5% 7% 4% 10%

- **Average Frequency % Change**
  - All: 14% 12% 9% 6% -1%
  - Last 4: 19% 15% 13% 10% 9%
  - Last 4 (Excl 2010): 14% 14% 18% 14% 3%
  - Last 2: 19% 22% 27% 24% 12%

- **Average % Change**
  - All: 14% 14% 12% 9% 6%
  - Last 4: 14% 14% 16% 13% 10%
  - Last 4 (Excl 2010): 16% 17% 24% 22% 13%
  - Last 2: 12% 10% 10% 8% 13%
Capped bodily injury
Projected Results (Type 1)

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa)

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>£0 - 1k</th>
<th>£1k - 10k</th>
<th>£10k - 20k</th>
<th>£20k - 50k</th>
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<td>0.52</td>
<td>0.50</td>
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<td>0.51</td>
<td>0.65</td>
</tr>
<tr>
<td>2005</td>
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<td>0.54</td>
<td>0.53</td>
<td>0.52</td>
<td>0.65</td>
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<td>2006</td>
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<td>0.67</td>
<td>0.66</td>
<td>0.75</td>
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<td>2007</td>
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<td>0.78</td>
<td>0.80</td>
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<td>2008</td>
<td>0.85</td>
<td>0.84</td>
<td>0.77</td>
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<td>2009</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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<tr>
<td>2010</td>
<td>0.52</td>
<td>0.50</td>
<td>0.51</td>
<td>0.51</td>
<td>0.65</td>
</tr>
<tr>
<td>2011</td>
<td>0.57</td>
<td>0.54</td>
<td>0.53</td>
<td>0.52</td>
<td>0.65</td>
</tr>
</tbody>
</table>

2010 & Prior
- Normalising for TPD, frequency shows a more inflationary picture at c. 14% over all years; 15% (2008-11)
- Similar inflation is seen up to layer 4; but with more marked increases in inflation across layers 2-4 since 2008.

2011 is an outlier (or a new trend?) with inflation at 18%. Layer 2 is similar, but layers 3, 4 and 5 show inflation at c. 30% at marked variance to previous years. However inflation across 2010 and 2011 is not out of line with longer averages.
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1. Data
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   d. How weak/strong are case estimates?
   e. What changes has MOJ brought about?
5. Conclusions
Question b: 2011 – catch-up or new trend?

- Q1 & Q4 saw snow/ice in 2010; with Q2 being unusually dry
- 2011 did not see these more extreme weather patterns
- 30 April 2010 saw the introduction of the MOJ reforms attaching to accidents post that date
- The following charts will show that the predominant effect could be weather related through to layer 2. A potential MOJ effect may additionally be seen in Layer 3 post introduction to the end of 2010, with no particular evidence of this for Layer 2.
- Overall the predominant effect is likely to be weather with MOJ being a smaller factor. Any MOJ factor may risk late reporting/deterioration – although this risk will diminish as time passes.
- As such 2011 is largely a catch up and it is appropriate to average the frequency inflation over the two years: 2011 inflation does not appear to be setting a new trend.
Transactional Analysis – 0-1k Layer
Data trends

![TPI/TPD Claim Numbers Ratio](image)

2010 saw a drop, and 2011 a sharp rise in the proportion of third party accidents involving TPI.

Inflation Rates:
- 2010-2011: 18.3%
- 2009-2010: 8.8%
- 2008-2009: 11.3%
- 2007-2008: 23.2%
- 2006-2007: 8.6%
Transactional Analysis – 0-1k Layer

Data trends

TPI/TPD Claim Numbers Ratio

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The Q1 differences are particularly marked. This could be attributed to snow & ice leading to lower driving speeds + more non vehicle collisions leading to less TPI/TPD

Variation from 10 year quarterly average rainfall in England & Wales
Source: Met Office Hadley Observation centre

Inflation Rates
10Q1-11Q1: 20%  09Q1-10Q1: 6%
Transactional Analysis – 0-1k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Q2 sees differences but less marked. Differences could result from the introduction of MOJ in Q2 2010 or unusually dry weather in the same quarter.

Variation from 10 year quarterly average rainfall in England & Wales
Source: Met Office Hadley Observation centre

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Transactional Analysis – 0-1k Layer
Data trends

Although Q3 sees differences, they are not marked. Q3 2010 was wetter than Q3 2011, but potentially within the bounds of the “normal”. Any potential MOJ effect was short-lived.

Variation from 10 year quarterly average rainfall in England & Wales
Source: Met Office Hadley Observation centre

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Inflation Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>10Q3-11Q3: 13%</th>
<th>09Q3-10Q3: 10.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>-7%</td>
<td>-12%</td>
</tr>
<tr>
<td>2010</td>
<td>7%</td>
<td>-39%</td>
</tr>
<tr>
<td>2011</td>
<td>-9%</td>
<td>-24%</td>
</tr>
</tbody>
</table>
Transactional Analysis – 0-1k Layer
Data trends

Variation from 10 year quarterly average rainfall in England & Wales
Source: Met Office Hadley Observation centre

The Q4 differences are particularly marked and as in Q1 are plausibly due to snow & ice in 2010 leading to less TPI / TPD

Inflation Rates
10Q4-11Q4: 27.2%  09Q4-10Q4: 11.1%

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>-7%</td>
</tr>
<tr>
<td>2010</td>
<td>7%</td>
</tr>
<tr>
<td>2011</td>
<td>-9%</td>
</tr>
</tbody>
</table>

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Transactional Analysis – 10k-20k Layer
Data trends

The difference in Band 3 is more marked (although across fewer claims) – but puzzling ...

Inflation Rates

10-11: 27.7%  09-10: 0.4%  08-09: 18%  07-08: 26.1%  06-07: 3.1%
Transactional Analysis – 10k-20k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter
Whilst there is the same Q1 “weather” difference (no bigger) ...
Transactional Analysis – 10k-20k Layer Data trends

TPI/TPD Claim Numbers Ratio

..any Q2 weather / MOJ impact is as marked here as in Q1 (more so than in layers below) ...
Transactional Analysis – 10k-20k Layer
Data trends

TPI/TPD Claim Numbers Ratio

... but in Q3 where weather would not cause a good 2010; 2010 is much better than 2011 for this layer – it was similar for the layers below. One hypothesis is that the introduction of MOJ impacted this layer (multi-claimants?) more strongly.

Inflation Rates
10Q3-11Q3: 26.9% 09Q3-10Q3: -2.2%
Transactional Analysis – 10k-20k Layer Data trends

TPI/TPD Claim Numbers Ratio

... With Q4 seeing both a weather and an MOJ effect. Any MOJ “under-reporting” element in this layer could be subject to late development

Inflation Rates
10Q4-11Q4: 52.1% 09Q4-10Q4: 0.5%

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   e. What changes has MOJ brought about?
5. Conclusions
Question c: What do we know about multi-claimant claims?

- MOJ individual claimant indemnity element of claim is in the range £1k to £10k.
- Multi-claimant claims would reasonably be expected to impact the £10k-£20k band
- Recognising we have no claimant data, can we infer anything about claimant per claim rates?
On the hypothesis that claims terminating in this layer are predominantly multi-claimant whiplash-type claims, we would expect a strong relationship between the average cost of layers two and three.

We see a consistent relationship albeit with small levels of inflation, potentially driven by claimants per claim inflation.

The implied claimant per claim ratio consistent with this hypothesis is 1.4.
Transactional Analysis – 10k-20k Layer

Data trends

- Assuming claims finishing in layers two and three are predominantly whiplash-type claims (with those in layer two being single claimant and those in layer three being multi-claimant)
- The previous slide would then give an approximation to the average claimants per claim for multi-claimant whiplash-type claims of 2.7
- Using the number of claims ultimately finishing in layers two and three as a weighting (slide 37), this implies an average number of claimants per claim for all whiplash-type claims of circa 1.4
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   e. What changes has MOJ brought about?
5. Conclusions
Question d: How weak/strong are case estimates?

- There were material concerns in 2010 that case estimates had weakened, with the risk that any reserving based on incurred methods could be flawed.
- Emerging evidence suggests that this risk has reduced. It is hard to conclude however that it has disappeared.
Capped bodily injury
Projected Results

Capped TPI Incurred Claims - Percentage of Ultimate

- Incurred patterns has shown less redundancy and more deficiency over time, commensurate with a weakening in case estimates
- This appears to have now stabilised for 2009 and subsequent accident years
**Transactional Analysis – 10k-20k Layer**

**Data trends**

**Claim Settlement Rate**

- Pre MOJ settlement rate was increasing
- MOJ claims initially slower but have since sped up

- This layer will include multi-claimant whiplash-type claims
Although this band is impacted by MOJ-type claims, it is not going to be materially impacted by legal costs which will influence the bands below.

Increase of paid to incurred ratio in recent accident quarters, following a decrease in prior periods. Given speeding up of settlement rates for older periods, this may imply a strengthening of case estimates, at least for older accident quarters.
Settlement rates slowed post MOJ, with evidence of catching up in the 2011 accident year, as well as an operational catch up in all earlier periods.
This has been stable or reducing. Given the accelerating settlement rates for pre-MOJ accident periods, the reductions would suggest improving case estimate strengths. Post-MOJ, the reduction in the ratios is consistent with the reduced settlement rates.
Claim Settlement Rate

Large increase in settlement rate for all years in recent post MOJ periods

Inflation Rates
10-11: 462.2%  09-10: -0.4%  08-09: 15.2%  07-08: 15.2%  06-07: 8.5%
Paid to Incurred Ratio

This has been broadly constant, with slight increases. These increases are less than those seen in settlement rates, and so do not point to any weakening in case estimate strength.

Inflation Rates

10-11: 46.2%  09-10: -31.3%  08-09: 6.9%  07-08: 1.1%  06-07: 1.8%
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   e. What changes has MOJ brought about?
5. Conclusions
Capped bodily injury
Projected Results

Capped TPI Claim Numbers - Percentage of Ultimate

- Patterns have been very consistent over time
Capped bodily injury
Projected Results

- Payment patterns have been speeding up since the smaller sized (faster paying) claims have grown.
- This has accelerated post MOJ with faster legal payments.
Transactional Analysis – 0-1k Layer
Data trends

Nil Claims Proportion

... as nil settlement rates increased slightly pre MOJ but decreased post MOJ

Inflation Rates
10-11: -10.6%  09-10: -4%  08-09: -0.8%  07-08: 0.4%  06-07: 2.1%
Transactional Analysis – 0-1k Layer

Data trends

- Settlement rates for small claims have been gradually increasing since the onset of the MOJ process.
- This increase is all the more marked as nils which would be expected to settle quickly have been reducing.
Transactional Analysis – 0-1k Layer

Data trends

**Paid to Incurred Ratio**

The MOJ process appears to have sped up payments for small claims (to recap, for Stage 1, insurers have 15 days to accept/reject liability after which a fixed legal fee of £400 + VAT per claimant is payable within 10 days).

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Transactional Analysis – 0-1k Layer (excl nils)

Data trends

Frequency of Claims in Layer (excl nils)
Layer 1: 0 to 1k

Very few claims end in this layer, but strong relative increases in frequency post MOJ potentially due to:

- Increased direct capture without the legal costs that would push claims into the next layer driven by
  - Increased company activity
  - Claimant push as CMCs/lawyers can’t get involved <£1k
- MOJ claims that progress through Stage I successfully incurring £480 legal fees, but get marooned at Stage II by
  Third Party
- Faster recognition

Inflation Rates
10-11: 18.7%  09-10: 2.8%  08-09: -8%  07-08: -10.9%  06-07: 11.1%
Transactional Analysis – 1k-10k Layer

Data trends

Claim Settlement Rate

Settlement rates for this layer have been gradually increasing since the onset of the MOJ process, with a drop when the process was first introduced.

MOJ process begins here

Development Month
The paid to incurred ratio appears to be following a new pattern post MOJ, which is evidencing on-going increases. This may be due to early fast direct settlements or to MOJ legal fees which are paid out at an early stage (total stage 1 and stage 2 legal payments = £1620).
1. Data
2. Scene Setting
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4. Questions & Hypotheses
   a. What is small TPI inflation?
   b. 2011 – catch-up or new trend?
   c. What do we know about multi-claimant claims?
   d. How weak/strong are case estimates?
   e. What changes has MOJ brought about?
5. Conclusions
### Questions and Provisional Answers

<table>
<thead>
<tr>
<th>Questions</th>
<th>Our Provisional Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. What is small TPI inflation?</td>
<td>• Burn cost inflation has increased slightly since 2008, now sitting at 15%. Greater numbers of claims between £20k &amp; £50k have been the greatest contributor to recent higher inflation. If future TPD frequencies do not drop, prospective burn cost inflation could be &gt; 20%.</td>
</tr>
</tbody>
</table>
| b. 2011 – catch up or new trend?              | • Catch Up from 2010 experience driven by  
  i. Anomalous weather in 2010  
  ii. MOJ changes disrupting CMCs?  
  • These support 2011 being a catch-up  
  • Relatively, 2010 should not develop adversely based on i; but ii could bring (diminishing) risk of “back-farming” |
| c. What do we know about multi-claimant claims? | • data supports £10k-£20k layer being dominated by multi-claimant claims, with c. 1.4 claimants / claim                                                                                                                                 |
| d. How weak/strong are case estimates?        | • Case estimates were identified as weak in our 09/10 work; they have strengthened but are still a concern                                                                                                                                                                   |
| e. What’s changed post MOJ?                   | • Simple whiplash claims settling faster; inflation continues. Adverse operational impact on large claims now diminishing.                                                                                                                                               |
Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.
The views expressed in this presentation are those of the presenter.
Appendix
Appendix
Notes on projections

- Mechanical projection methodology
- Claims have been projected in 11 layers (all in 2010 money, indexed at 7% pa)
  - 0 to 1k
  - 1k to 10k
  - 10k to 20k
  - 20k to 50k
  - 50k to 100k
  - 100k to 250k
  - 250k to 500k
  - 500k to 1m
  - 1m to 2m
  - 2m to 5m
  - 5m+
- Previous TPWP reports have not indexed layers. Therefore meaningful comparisons can not be made between this and previous studies
- The first six layers (up to 250k) are projected by accident quarter, the remaining layers are projected by accident year
Notes on projections

- The claims data used for this analysis contains shifts in the underlying proportions of claims between contributors, who may display differing case reserving philosophies for the largest claims over time. Because of this, the TPWP feels that any mechanical projection of combined paid or incurred claims for the aggregate market is likely to be misleading.

- For this reason, insurers with differing case reserving philosophies were treated separately in this review. This is a different approach to the previous study.

- The results of the initial layered analysis were then appropriately adjusted in order to give results that are in line with the separate projections mentioned above.
Initial Projection Methodology

Claim Numbers

The claim number projections were based on a mechanical application of the following process:

• A basic chain-ladder technique was applied to a triangle of reported claim numbers by quarterly origin for layers < £250k and annual origin for layers > 250k.

• A trend line was fitted to the implied projected claim frequency between 2007Q1 and 2010Q2 (for layers < £250k) or between 2006 and 2010 (for layers > £250k).

• The selected claim frequency was taken as the basic chain-ladder projection for accident years prior to 2011 and a weighted-average (Bornhuetter-Ferguson) of the basic chain-ladder projection and the trended frequency for 2011.
Initial Projection Methodology

Claim Amounts

The claim amount projections were based on a mechanical application of the following process:

• A basic chain-ladder technique was applied to triangles of paid claims and incurred claims by quarterly origin for layers < £250k and annual origin for layers > £250k.
• The implied initial average cost was estimated by combining the projected paid and projected incurred:
  – For layers < £100k, an average of the projected paid and projected incurred was used up to and including 2010Q2 and the projected incurred for 2010Q3 onwards.
  – For layers between £100k and £1m, an average of the projected paid and projected incurred was used up to and including 2008 and the projected incurred for 2009 onwards.
  – For layers > £1m, the projected incurred was selected for all accident periods.
Initial Projection Methodology
Claim Amounts

- A trend line was fitted to the implied initial average cost between 2007Q1 and 2010Q4 (for layers < £250k) or between 2006 and 2010 (for layers > 250k).
- The selected average cost was taken as the basic chain-ladder projection for accident years prior to 2011 and a weighted-average (Bornhuetter-Ferguson) of the basic chain-ladder projection and the trended average cost for 2011.
- No tail beyond 12 years as the earliest data if from 2000.
- An x% tail factor would increase ultimates for all accident years by x% but with the same trend across years.
- Any projection based on incurred data is reliant on the accuracy and consistency of case estimates over time.
Summary of Published Findings (June 2012)

Claim frequency

Reported Claim Frequency (inc nils)

Inflation Rates
10-11: 4.7%  09-10: 0.7%  08-09: 9.5%  07-08: 4.8%  06-07: 8.5%
Summary of Published Findings (June 2012)
Ratio of TPI to TPD claim numbers

Private Car Comp
Reported Claim Numbers (inc nils) - TPI/TPD Ratio

Inflation Rates
10-11: 17.7%  09-10: 6.9%  08-09: 10.9%  07-08: 12.4%  06-07: 7.5%
Notes to Graphs
All Layers

• Development graphs in the 0 to 1k and 1k to 10k layers are shown on a monthly origin basis except ‘reported claim frequency’ which is shown on both an annual and a quarterly origin basis
• Development graphs in the 10k to 20k and 20k to 50k layers are shown on a quarterly origin basis except ‘reported claim frequency’ which is shown on both an annual and a quarterly origin basis
• Development graphs in the 50k to 100k layer are shown on an annual origin basis except ‘reported claim frequency’ which is shown on both an annual and a quarterly origin basis
• The transactional analysis is based on transactional data provided by contributors and therefore may differ from the triangular analysis due to differences in contributors
Introduction

Graph terminology

<table>
<thead>
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<th>Layer</th>
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<td>£1m - 2m</td>
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</tr>
<tr>
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<td>£250k - 500k</td>
<td>4.0%</td>
</tr>
<tr>
<td>£100k - 250k</td>
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</tr>
<tr>
<td>£50k - 100k</td>
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</tr>
<tr>
<td>£20k - 50k</td>
<td>9.6%</td>
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<tr>
<td>£10k - 20k</td>
<td>12.8%</td>
</tr>
<tr>
<td>£1k - 10k</td>
<td>39.0%</td>
</tr>
<tr>
<td>£0 - 1k</td>
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### Introduction

#### Graph terminology

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![Layer Type 2 - Burning cost contribution](chart.png)
## Projected Ultimate Capped TPI Results for Private Car Comprehensive

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<th>Accident Period</th>
<th>Earned Exposure (millions of policy years)</th>
<th>Ultimate Capped Claim Frequency (claims per million vehicle years)</th>
<th>Ultimate Capped Claim Severity (£000s)</th>
<th>Ultimate Capped Burning Cost (£)</th>
<th>Year-on-Year Change in Frequency (% pa)</th>
<th>Year-on-Year Change in Severity (% pa)</th>
<th>Year-on-Year Change in Burning Cost (% pa)</th>
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<td>9,879</td>
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### Capped bodily injury

#### Projected Results (Type 1)

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa)

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<th>&lt; 100k</th>
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# Capped bodily injury

## Projected Results (Type 2)

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

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<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
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### Average Cost (£000s)

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<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
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### Burning Cost (£)

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<th>£10k - 20k</th>
<th>£20k - 50k</th>
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<th>£&lt; 100k</th>
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Capped bodily injury
Projected Results (Type 1)

Private Car Comprehensive Type 1 Layered Results (all layers given in 2010 money, indexed at 7% pa) - Implied % Change

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Frequency % Change

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<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>2008</td>
<td>8%</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>7%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>2009</td>
<td>8%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>7%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>2010</td>
<td>8%</td>
<td>6%</td>
<td>5%</td>
<td>8%</td>
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<tr>
<td></td>
<td>8%</td>
<td>7%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>2011</td>
<td>8%</td>
<td>5%</td>
<td>7%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Average % Change

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Last 4</th>
<th>Last 4 (Excl 2010)</th>
<th>Last 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>7%</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>2005</td>
<td>8%</td>
<td>6%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>7%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>2006</td>
<td>8%</td>
<td>5%</td>
<td>7%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Average Cost % Change

<table>
<thead>
<tr>
<th>Year</th>
<th>£0 - 1k</th>
<th>£1k - 10k</th>
<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
<th>&lt; 100k</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>2005</td>
<td>8%</td>
<td>13%</td>
<td>1%</td>
<td>-3%</td>
<td>-3%</td>
<td>8%</td>
</tr>
<tr>
<td>2006</td>
<td>14%</td>
<td>12%</td>
<td>9%</td>
<td>6%</td>
<td>-1%</td>
<td>10%</td>
</tr>
<tr>
<td>2007</td>
<td>19%</td>
<td>15%</td>
<td>13%</td>
<td>10%</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>2008</td>
<td>14%</td>
<td>14%</td>
<td>18%</td>
<td>14%</td>
<td>3%</td>
<td>14%</td>
</tr>
<tr>
<td>2009</td>
<td>19%</td>
<td>22%</td>
<td>27%</td>
<td>24%</td>
<td>12%</td>
<td>22%</td>
</tr>
<tr>
<td>2010</td>
<td>10%</td>
<td>6%</td>
<td>4%</td>
<td>-9%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>2011</td>
<td>14%</td>
<td>14%</td>
<td>27%</td>
<td>28%</td>
<td>24%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Burning Cost % Change

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Last 4</th>
<th>Last 4 (Excl 2010)</th>
<th>Last 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>8%</td>
<td>13%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>2005</td>
<td>14%</td>
<td>14%</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>2006</td>
<td>14%</td>
<td>14%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>2007</td>
<td>14%</td>
<td>17%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>2008</td>
<td>16%</td>
<td>17%</td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td>2009</td>
<td>16%</td>
<td>10%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>2010</td>
<td>12%</td>
<td>10%</td>
<td>10%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Average % Change

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Capped bodily injury
Projected Results (Type 1)

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>£0 - 1k</th>
<th>£1k - 10k</th>
<th>£10k - 20k</th>
<th>£20k - 50k</th>
<th>£50k - 100k</th>
<th>£50k - 100k</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>0.52</td>
<td>0.50</td>
<td>0.51</td>
<td>0.51</td>
<td>0.65</td>
<td>0.52</td>
</tr>
<tr>
<td>2005</td>
<td>0.57</td>
<td>0.54</td>
<td>0.53</td>
<td>0.52</td>
<td>0.65</td>
<td>0.57</td>
</tr>
<tr>
<td>2006</td>
<td>0.70</td>
<td>0.67</td>
<td>0.67</td>
<td>0.66</td>
<td>0.75</td>
<td>0.70</td>
</tr>
<tr>
<td>2007</td>
<td>0.78</td>
<td>0.76</td>
<td>0.78</td>
<td>0.78</td>
<td>0.80</td>
<td>0.78</td>
</tr>
<tr>
<td>2008</td>
<td>0.85</td>
<td>0.84</td>
<td>0.77</td>
<td>0.74</td>
<td>0.79</td>
<td>0.85</td>
</tr>
<tr>
<td>2009</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Average</td>
<td>14%</td>
<td>15%</td>
<td>14%</td>
<td>14%</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>Last 4</td>
<td>15%</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Last 4 (Excl 2010)</td>
<td>17%</td>
<td>19%</td>
<td>24%</td>
<td>27%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Last 2</td>
<td>13%</td>
<td>14%</td>
<td>13%</td>
<td>13%</td>
<td>12%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Transactional Analysis – 0-1k Layer

Data trends

Reported Claim Frequency

Inflation Rates

10-11: 6.2%  09-10: 1.9%  08-09: 10.3%  07-08: 5.4%  06-07: 11.3%
Transactional Analysis – 0-1k Layer
Data trends

Nil Claims Proportion

Inflation Rates
10-11: -10.6%  09-10: -4%  08-09: -0.8%  07-08: 0.4%  06-07: 2.1%
Transactional Analysis – 0-1k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10-11: 18.3%  09-10: 8.8%  08-09: 11.3%  07-08: 23.2%  06-07: 8.6%
Transactional Analysis – 0-1k Layer
Data trends

TPI/TPD Claim Numbers Ratio

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Transactional Analysis – 0-1k Layer Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter
Inflation Rates
10Q1-11Q1: 20%  09Q1-10Q1: 6%
Transactional Analysis – 0-1k Layer Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates

10Q2-11Q2: 14.2%  09Q2-10Q2: 7.4%
Transactional Analysis – 0-1k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q3-11Q3: 13%  09Q3-10Q3: 10.9%

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Transactional Analysis – 0-1k Layer Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q4-11Q4: 27.2%  09Q4-10Q4: 11.1%
Transactional Analysis – 0-1k Layer (excl nils)
Data trends

TPI/TPD Claim Numbers Ratio

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Transactional Analysis – 0-1k Layer (excl nils)

Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates

10Q1-11Q1: 21.8%  
09Q1-10Q1: 6.3%
Transactional Analysis – 0-1k Layer (excl nils)
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates

10Q2-11Q2: 15.9% 09Q2-10Q2: 8.5%
Transactional Analysis – 0-1k Layer (excl nils)
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q3-11Q3: 14.5%  09Q3-10Q3: 11.5%
Transactional Analysis – 0-1k Layer (excl nils)

Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q4-11Q4: 27.2%  09Q4-10Q4: 12.6%
Transactional Analysis – 0-1k Layer

Data trends

Reported Claim Frequency

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Transactional Analysis – 0-1k Layer
Data trends

Reported Claim Frequency

Development Month

Inflation Rates
10Q1-11Q1: 0.4%  09Q1-10Q1: 5.2%

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Transactional Analysis – 0-1k Layer

Data trends

Reported Claim Frequency

Inflation Rates

10Q2-11Q2: 7.9%  09Q2-10Q2: -1.4%
Transactional Analysis – 0-1k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10Q3-11Q3: 7.3%    09Q3-10Q3: 1%
Transactional Analysis – 0-1k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10Q4-11Q4: 10.8%  09Q4-10Q4: 2.7%
Transactional Analysis – 0-1k Layer (excl nils)
Data trends

Reported Claim Frequency

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Transactional Analysis – 0-1k Layer (excl nils)
Data trends

Reported Claim Frequency

Development Month

Inflation Rates
10Q1-11Q1: 1.9%  09Q1-10Q1: 5.5%
Transactional Analysis – 0-1k Layer (excl nils)
Data trends

Reported Claim Frequency

Inflation Rates
10Q2-11Q2: 9.4%    09Q2-10Q2: -0.5%
Transactional Analysis – 0-1k Layer (excl nils)

Data trends

Reported Claim Frequency

Development Month

Inflation Rates

10Q3-11Q3: 8.7%  09Q3-10Q3: 1.5%

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Transactional Analysis – 0-1k Layer (excl nils)
Data trends

Reported Claim Frequency

Inflation Rates
10Q4-11Q4: 10.8%  
09Q4-10Q4: 4.1%
Transactional Analysis – 0-1k Layer
Data trends

Claim Settlement Rate
Transactional Analysis – 0-1k Layer (excl nils)
Data trends

Claim Settlement Rate

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Transactional Analysis – 0-1k Layer
Data trends

Paid to Incurred Ratio

Development Month

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Transactional Analysis – 0-1k Layer

Data trends

Incurred Average Cost

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Frequency of Claims in Layer (excl nils)

Layer 1: 0 to 1k

Inflation Rates
10-11: 18.7%  09-10: 2.8%  08-09: -8%  07-08: -10.9%  06-07: 11.1%
Transactional Analysis – 0-1k Layer (excl nils)

Data trends

FGU Incurred Average Cost of Claims in Layer (excl nils)

Layer 1: 0 to 1k

Inflation Rates

- 10-11: 14.5%
- 09-10: 10.4%
- 08-09: 3.5%
- 07-08: 12.1%
- 06-07: 5.7%
Transactional Analysis – 0-1k Layer (excl nils)

Data trends

**FGU Average Cost of Claims Settling in Layer (excl nils)**

Layer 1: 0 to 1k

**Inflation Rates**

- 10-11: 10.8%
- 09-10: 10.1%
- 08-09: 4.4%
- 07-08: 11.4%
- 06-07: 6.5%

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Transactional Analysis – 0-1k Layer (excl nils)

Data trends

FGU Incurred Burning Cost
Layer 1: 0 to 1k

Inflation Rates

- Layer 1: 0 to 1k
- 10-11: 35.8%
- 09-10: 13.5%
- 08-09: -4.8%
- 07-08: -0.1%
- 06-07: 17.5%
Transactional Analysis – 1k-10k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

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Transactional Analysis – 1k-10k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q1-11Q1: 21.8%  09Q1-10Q1: 6.6%
Transactional Analysis – 1k-10k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q2-11Q2: 15.8%  09Q2-10Q2: 8.4%
Transactional Analysis – 1k-10k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q3-11Q3: 13.5%   09Q3-10Q3: 11.3%
Transactional Analysis – 1k-10k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q4-11Q4: 26.4%  09Q4-10Q4: 12.6%
Transactional Analysis – 1k-10k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10-11: 7.1%  09-10: 2.7%  08-09: 12.3%  07-08: 7.4%  06-07: 10.7%
Transactional Analysis – 1k-10k Layer

Data trends

Reported Claim Frequency

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Transactional Analysis – 1k-10k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10Q1-11Q1: 1.9%
09Q1-10Q1: 5.8%
Transactional Analysis – 1k-10k Layer
Data trends

Reported Claim Frequency

Development Month

Inflation Rates
10Q2-11Q2: 9.3% 09Q2-10Q2: -0.5%
Transactional Analysis – 1k-10k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10Q3-11Q3: 7.7%  09Q3-10Q3: 1.4%
Transactional Analysis – 1k-10k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10Q4-11Q4: 10%  09Q4-10Q4: 4.1%
Transactional Analysis – 1k-10k Layer
Data trends

Claim Settlement Rate

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Transactional Analysis – 1k-10k Layer
Data trends

Paid to Incurred Ratio

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Transactional Analysis – 1k-10k Layer
Data trends

Frequency of Claims in Layer
Layer 2: 1k to 10k

Development Month

Inflation Rates
10-11: 5%  09-10: 6.3%  08-09: 10.3%  07-08: 7.2%  06-07: 13.1%
FGU Incurred Average Cost of Claims in Layer

Layer 2: 1k to 10k

Inflation Rates

10-11: 5.5%   09-10: 5.7%   08-09: 6.7%   07-08: 5.7%   06-07: 3.9%
FGU Average Cost of Claims Settling in Layer

Layer 2: 1k to 10k

Inflation Rates

Layer 2: 1k to 10k
10-11: 3.5%  09-10: 6.3%  08-09: 7.2%  07-08: 5.9%  06-07: 4%
Transactional Analysis – 1k-10k Layer Data trends

FGU Incurred Burning Cost
Layer 2: 1k to 10k

Development Month

Inflation Rates
10-11: 10.8%  09-10: 12.3%  08-09: 17.8%  07-08: 13.2%  06-07: 17.5%

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FGU Average Cost of Claims Settling in Layer 2 over FGU Average Cost of Claims Settling in Layer 1 (excl nils)

Inflation Rates
10-11: -6.6%  09-10: -3.4%  08-09: 2.7%  07-08: -4.9%  06-07: -2.4%
Transactional Analysis – 10k-20k Layer

Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10-11: 27.7%  09-10: 0.4%  08-09: 18%  07-08: 26.1%  06-07: 3.1%
Transactional Analysis – 10k-20k Layer
Data trends

TPI/TPD Claim Numbers Ratio

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Transactional Analysis – 10k-20k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q1-11Q1: 19.3%    09Q1-10Q1: 4.3%

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Transactional Analysis – 10k-20k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q2-11Q2: 20.5%  09Q2-10Q2: -0.4%
Transactional Analysis – 10k-20k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q3-11Q3: 26.9%  09Q3-10Q3: -2.2%
Transactional Analysis – 10k-20k Layer Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q4-11Q4: 52.1% 09Q4-10Q4: 0.5%
Transactional Analysis – 10k-20k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10-11: 14.7%  09-10: -6.4%  08-09: 13.3%  07-08: 6.3%  06-07: 5.2%
Transaction Analysis – 10k-20k Layer
Data trends

Reported Claim Frequency

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Transaction Analysis – 10k-20k Layer
Data trends

Reported Claim Frequency

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Transactional Analysis – 10k-20k Layer Data trends

Reported Claim Frequency

Development Month

Inflation Rates
10Q2-11Q2: 13.8%  09Q2-10Q2: -8.6%
Transactional Analysis – 10k-20k Layer
Data trends

Reported Claim Frequency

Development Month

Inflation Rates
10Q3-11Q3: 20.5% 09Q3-10Q3: -10.9%
Transactional Analysis – 10k-20k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10Q4-11Q4: 32.5%  09Q4-10Q4: -7.1%
Transactional Analysis – 10k-20k Layer
Data trends

Claim Settlement Rate

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Transactional Analysis – 10k-20k Layer
Data trends

Paid to Incurred Ratio

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Transactional Analysis – 10k-20k Layer
Data trends

Frequency of Claims in Layer
Layer 3: 10k to 20k

Inflation Rates
Layer 3: 10k to 20k

Development Month
0.00% 0.05% 0.10% 0.15% 0.20% 0.25%
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71

Inflation Rates
10-11: 12.9% 09-10: -4.3% 08-09: 16.6% 07-08: 6.7% 06-07: 6.6%

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FGU Incurred Average Cost of Claims in Layer

Layer 3: 10k to 20k

Inflation Rates

10-11: 7.6%  09-10: 7.3%  08-09: 7.6%  07-08: 7.4%  06-07: 6.9%
FGU Average Cost of Claims Settling in Layer

Layer 3: 10k to 20k

Development Month

Inflation Rates

10-11: 6.7%  09-10: 7%  08-09: 7.8%  07-08: 7.7%  06-07: 7.1%
FGU Average Cost of Claims Settling in Layer 3 over FGU Average Cost of Claims Settling in Layer 2

Inflation Rates
- 10-11: 3.1%
- 09-10: 0.6%
- 08-09: 0.5%
- 07-08: 1.7%
- 06-07: 3%

Development Month

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FGU Incurred Burning Cost

Layer 3: 10k to 20k

Inflation Rates

10-11: 21.5%  09-10: 2.6%  08-09: 25.4%  07-08: 14.6%  06-07: 13.9%
Transactional Analysis – 20k-50k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10-11: 32.6%  09-10: -3.5%  08-09: 18.7%  07-08: 28.8%  06-07: 1.5%
Transactional Analysis – 20k-50k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter
Transactional Analysis – 20k-50k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q1-11Q1: 23.1%  09Q1-10Q1: -3.3%

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Transactional Analysis – 20k-50k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates

10Q2-11Q2: 28.1%  09Q2-10Q2: -4.8%

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Transactional Analysis – 20k-50k Layer Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q3-11Q3: 34.8%  09Q3-10Q3: -5.5%

Inflation Rates
10Q3-11Q3: 34.8%  09Q3-10Q3: -5.5%

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Transactional Analysis – 20k-50k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q4-11Q4: 53.4%    09Q4-10Q4: 0.2%

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Transactional Analysis – 20k-50k Layer
Data trends

Reported Claim Frequency

Inflation Rates
10-11: 19.1%  09-10: -9.6%  08-09: 17.6%  07-08: 10.3%  06-07: 4.1%
Transactional Analysis – 20k-50k Layer Data trends

Claim Settlement Rate

Development Month

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Transactional Analysis – 20k-50k Layer
Data trends

Paid to Incurred Ratio

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Transactional Analysis – 20k-50k Layer
Data trends

Frequency of Claims in Layer
Layer 4: 20k to 50k

Inflation Rates
10-11: 18%  09-10: -9.6%  08-09: 20.6%  07-08: 13.8%
FGU Incurred Average Cost of Claims in Layer

Layer 4: 20k to 50k

Development Month

Inflation Rates

10-11: 7.1%  09-10: 6.2%  08-09: 6.9%  07-08: 6.1%  06-07: 6.3%
Transactional Analysis – 20k-50k Layer Data trends

FGU Average Cost of Claims Settling in Layer
Layer 4: 20k to 50k

Inflation Rates

Layer 4: 20k to 50k

Development Month

Inflation Rates

10-11: 10.7%  09-10: 6.3%  08-09: 8.3%  07-08: 7.1%  06-07: 6.8%
Transactional Analysis – 20k-50k Layer Data trends

FGU Average Cost of Claims Settling in Layer 4 over FGU Average Cost of Claims Settling in Layer 3

Development Month

Inflation Rates

10-11: 3.7%  09-10: -0.6%  08-09: 0.5%  07-08: -0.6%  06-07: -0.2%
Transactional Analysis – 20k-50k Layer Data trends

FGU Incurred Burning Cost
Layer 4: 20k to 50k

Inflation Rates

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Inflation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2007</td>
<td>10.7%</td>
</tr>
<tr>
<td>2007-2008</td>
<td>20.8%</td>
</tr>
<tr>
<td>2008-2009</td>
<td>29%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>-4%</td>
</tr>
<tr>
<td>2010-2011</td>
<td>-2.1%</td>
</tr>
</tbody>
</table>
Transactional Analysis

- 50k to 100k Layer
Transactional Analysis – 50k-100k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10-11: 37.8%  09-10: -3.8%  08-09: 7.7%  07-08: 15.3%  06-07: 1.3%
Transactional Analysis – 50k-100k Layer
Data trends

TPI/TPD Claim Numbers Ratio

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Transactional Analysis – 50k-100k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates

10Q1-11Q1: 50.7%  09Q1-10Q1: -7.2%
Transactional Analysis – 50k-100k Layer Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q2-11Q2: 23.2%  09Q2-10Q2: -10.1%
Transactional Analysis – 50k-100k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Development Quarter

Inflation Rates
10Q3-11Q3: 34.2%  09Q3-10Q3: -2.7%
Transaction Analysis – 50k-100k Layer
Data trends

TPI/TPD Claim Numbers Ratio

Inflation Rates
10Q4-11Q4: 48%  09Q4-10Q4: 5.6%
Reported Claim Frequency

Inflation Rates

10-11: 23.7%  09-10: -10%  08-09: 6.7%  07-08: -1.3%  06-07: 3.9%
Transactional Analysis – 50k-100k Layer
Data trends

Claim Settlement Rate

Inflation Rates
10-11: 462.2%  09-10: -0.4%  08-09: 15.2%  07-08: 15.2%  06-07: 8.5%
Transactional Analysis – 50k-100k Layer

Data trends

10-11: 46.2%  09-10: -31.3%  08-09: 6.9%  07-08: 1.1%  06-07: 1.8%
FGU Incurred Average Cost of Claims in Layer

Layer 5: 50k to 100k

Inflation Rates

10-11: 7.4%  09-10: 7.5%  08-09: 5.5%  07-08: 6.5%  06-07: 5.9%
FGU Average Cost of Claims Settling in Layer

Layer 5: 50k to 100k

Inflation Rates

- 09-10: -0.5%
- 08-09: 7.9%
- 07-08: 5%
- 06-07: 5.5%
Transactional Analysis – 50k-100k Layer Data trends

FGU Average Cost of Claims Settling in Layer 5 over FGU Average Cost of Claims Settling in Layer 4

Inflation Rates
09-10: -6.4%  08-09: -0.4%  07-08: -1.9%  06-07: -1.2%
FGU Incurred Burning Cost
Layer 5: 50k to 100k

Development Month

Inflation Rates
10-11: 22% 09-10: -5% 08-09: 11.2% 07-08: 9.2% 06-07: 11.4%

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Results of Questionnaire

- Following the initial data collection exercise, it became apparent that the breadth of data available from contributors was less than desired.
- The Working Party issued a data questionnaire asking contributors to assess the availability of 13 desired data items, and if unavailable, whether there were plans to capture this data.
- Contributors were asked to comment on claims handling systems and actuarial systems separately.
- The results from the 10 respondents are shown on the following slides.
Data Questionnaire – Results (1)

Number of claimants

Payments at individual claimant level

Claimant type indicator (e.g. own passenger, TP passenger, pedestrian etc)

Case estimates at individual claimant level

<table>
<thead>
<tr>
<th>Yes, including historic claims</th>
<th>Yes, but current claims only</th>
<th>No, but development planned within 1 year</th>
<th>No, but development planned in more than 1 year</th>
<th>Not available and no plans</th>
</tr>
</thead>
</table>
Data Questionnaire – Results (2)

Flag to indicate claim is in MoJ process

Source of claim notification (eg insured, TP, solicitor etc)

Indicator for latest stage of MoJ process reached

Injury type indicator

<table>
<thead>
<tr>
<th>Claims Handling Systems</th>
<th>Actuarial Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, including historic claims</td>
<td>Yes, but current claims only</td>
</tr>
<tr>
<td>No, but development planned within 1 year</td>
<td>No, but development planned in more than 1 year</td>
</tr>
<tr>
<td>Not available and no plans.</td>
<td>No, but development planned in more than 1 year</td>
</tr>
</tbody>
</table>

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Data Questionnaire – Results (3)

Credit hire involvement indicator

Heads of damage separately identified in case estimates (Eg general damages, special damages, legal fees etc)

Heads of damage separately identified in payments (Eg general damages, special damages, legal fees etc)

Indicator that PPO has been agreed

- Yes, including historic claims
- Yes, but current claims only
- No, but development planned within 1 year
- No, but development planned in more than 1 year
- Not available and no plans.
Conclusions

- Claims Handling Systems capture the majority of the additional data items, with the exception of PPOs
- Actuarial Systems are not generally extracting these additional data items
- Actuarial Systems need to be enhanced to monitor changing claims environment (e.g. MoJ process) and to be able to provide enhanced support to the business
- Whilst some data items are not currently available (classified as red), some companies have developed ad-hoc or manual data feeds to monitor this data