BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY

James Orr
Chief Actuary, General Insurance
Prudential Regulation Authority

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Dear Chief Actuary

Joining the dots – the Actuarial Function, underwriting, capital and reserving

Following our first letter to Chief Actuaries in February,[1] we are writing to: i) share insights from our meetings and discussions with this community; ii) highlight our continuing focus on realism in firms' business planning and underwriting policies; and iii) share detailed findings from our targeted reviews of firms' reserving. Our ongoing supervisory approach will focus on the areas described below. Please share this letter with your board; we continue to welcome your thoughts and feedback.

Introduction

The effective management of financial, and therefore prudential, risks within a firm relies on its ability to take a holistic[2] view of its risk profile. For example, optimism regarding future underwriting performance may lead to inadequate reserving or underestimation in the assessment of capital requirements. This can be a particular challenge where firms re-underwrite[3] their portfolios or move into new lines of business for which limited historical data is available.

Our discussions with firms and reviews of Actuarial Function Reports have in some cases identified insufficient challenge, or a lack of appropriate independence and objectivity in the views being expressed. The potential consequences of an ineffective actuarial function include risks from inadequate reserving (and capital assessments), leading to insufficient premiums, increased anti-selection and/or poor underwriting performance.

We set out weaknesses we had observed in some firms' underwriting and associated controls in our letter to Chief Executives of specialist general insurance firms of 31 May 2018.[4] These weaknesses are relevant to the actuarial function's specific responsibilities[5] and our ongoing supervisory work will consider the adequacy of firms' responses to them.

i) Insights from our meeting with Chief Actuaries

The inaugural Chief Actuary Forum for general insurers was attended by over 80 participants on 2 July 2018. PRA panel members led discussions on board engagement, structure of the actuarial function and issues with the sufficiency of premiums in the underwriting opinion. Key points that emerged included:

- Board engagement could be improved through more regular one-to-one discussions with individual board members and the provision of more concise reports to the board.
- Actuarial Function Report findings should include genuinely new material and not only a stock-take of ongoing work, and be covered in regular discussions with the board. From our individual discussions with Chief Actuaries, this may be the case when it comes to reserving, but some boards are engaging less with the actuarial function in relation to underwriting.
- The tasks of the actuarial function were generally considered to be a mixture of 'execution' tasks and 'oversight' tasks while still maintaining an appropriate level of independence.

ii) Our continued focus on business planning and underwriting policies

As already mentioned in Anna Sweeney's letter to CEOs in May on market conditions,[6] we continue to observe a disconnect between some firms' perceptions of current price adequacy and their views on recent risk adjusted rate changes; we saw evidence of some firms assuming greater profitability in their business plans than can be justified. Related to this, our review of Actuarial Function Reports pointed to insufficient consideration of premium adequacy. Some firms merely tracked performance against business plan assumptions rather than deeper, independent, analysis of how rates should be altered to reflect more generous terms and conditions being offered in the market.

We believe that consideration of premium[7] adequacy has been a challenge for the actuarial function, particularly when the underwriting portfolio or environment keeps changing, reducing the applicability of historical data that can be used to support analysis. We also recognise that this task requires the actuarial function to balance having sufficient knowledge of the pricing process against being able to offer an independent view. We will therefore be undertaking further work on business planning, underwriting policies and capital, and will share our findings in due course.

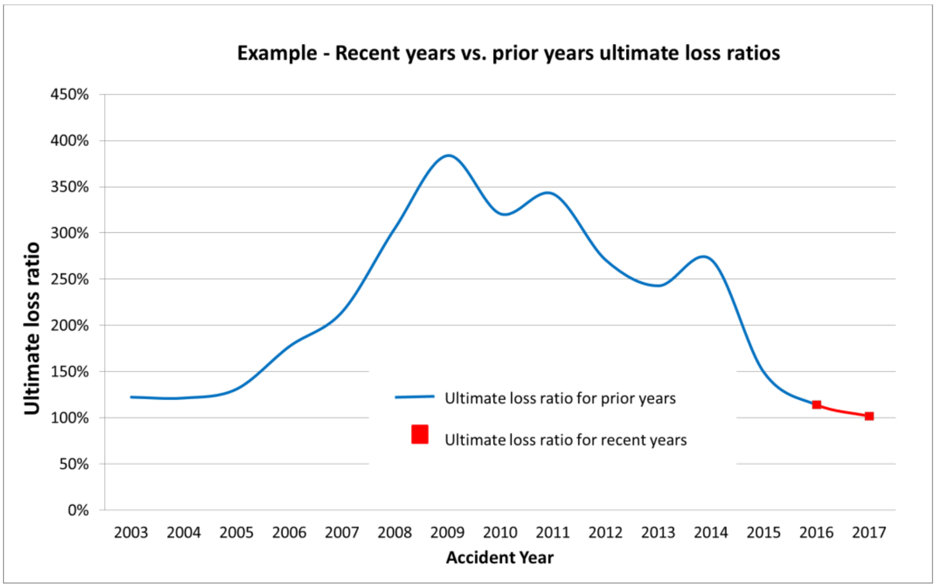
iii) Detailed findings from our targeted reviews of firms' reserving

The PRA conducted in-depth reviews with a sample of London Market insurers, focussing on casualty lines, to assess the adequacy of firms' reserving in view of the concerns highlighted in the letter to CEOs in May. The review included both desk-based analyses of firms' reserving files and meetings with firms and relevant stakeholders. The key findings from this review are summarised below. We believe all insurers could benefit from assessing the areas where their operations might require further development, and considering the actions they might take if so.

Reserving assumptions following portfolio changes: We saw examples where assumed initial expected loss ratios (IELRs) for recent years were considerably lower than historical experience. We saw instances where the IELRs for recent accident or underwriting years were 30% lower than historical experience, resulting in correspondingly lower reserves where an expected loss ratio methodology was applied. Similarly, at a wider market level we have observed lower ultimate loss ratios for the more recent years of account which are indicative of lower assumed initial expected loss ratios (see **Figure 1** for an example). Lower reserves would also arise where partial weight was given to the IELR (eg the Bornhuetter-Ferguson method).

Figure 1: Indicative low initial expected loss ratios

This example shows materially lower ultimate loss ratios for the current years (which is indicative of lower initial expected loss ratios) in comparison to the historical experience.



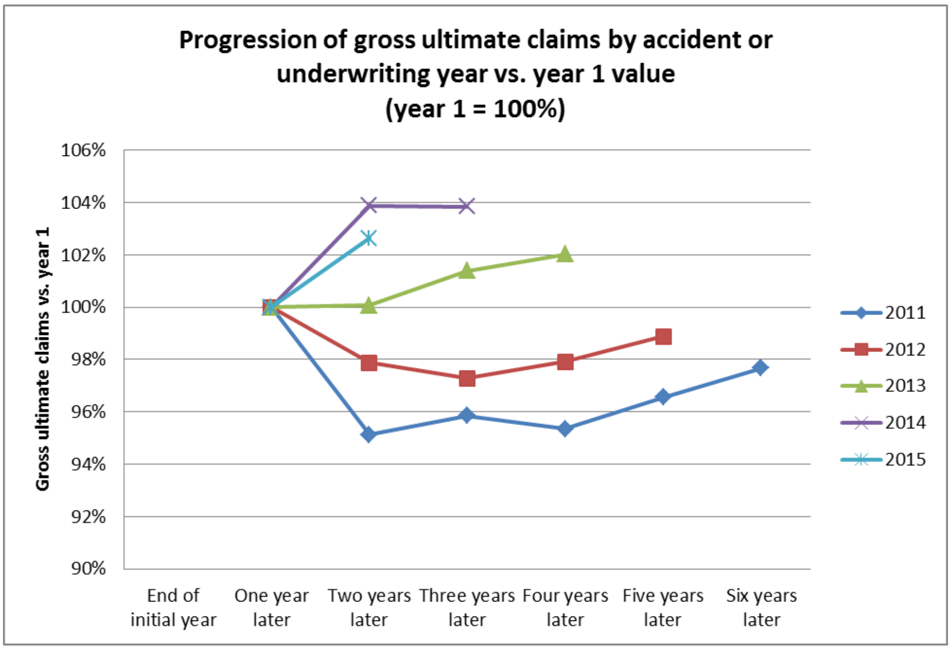
Source: Derived from aggregated SII data extracted from National Specific Templates for a sample of firms reporting on an accident year basis. Please note that SII data is on a cashflow basis, so the most recent years are distorted by the allowance of future premium. However, the loss ratios for the recent years still appear low compared to the historical experience even after taking this into account.

The assumed improvements in expected loss experience usually arose where the business within the portfolios had changed; firms were excluding historical years of poor performance to allow for expected improvements from the portfolio changes. Given that most of the classes we reviewed had been re-underwritten due to poor historical experience, firms may be giving credit for expected improvements without having objective evidence to support this.

There were also examples of credit for improvements being taken, even though the emerging experience suggested otherwise (as illustrated in **Figure 2**). This could result in unsound business decisions, issues with pricing adequacy and future reserve deteriorations.

Figure 2: Deterioration in ultimate claims

This illustrates an example of the inadequacy of initial estimates for more recent years of account.



Source: Analysis of gross ultimate claim triangulations from publicly available annual report and accounts as at year end 2017 for a sample of firms included within our review. Initial values ignored to minimise distortion caused by increase in earnings from end of year 0 to end of year 1 where public information was presented on an underwriting year basis.

New portfolios: Similarly, we observed cases where new portfolios were reserved using benchmarks due to the lack of data, even though emerging experience was worse than the benchmark. Again, this could result in inadequate reserves, showing a similar development to that illustrated in **Figure 2**.

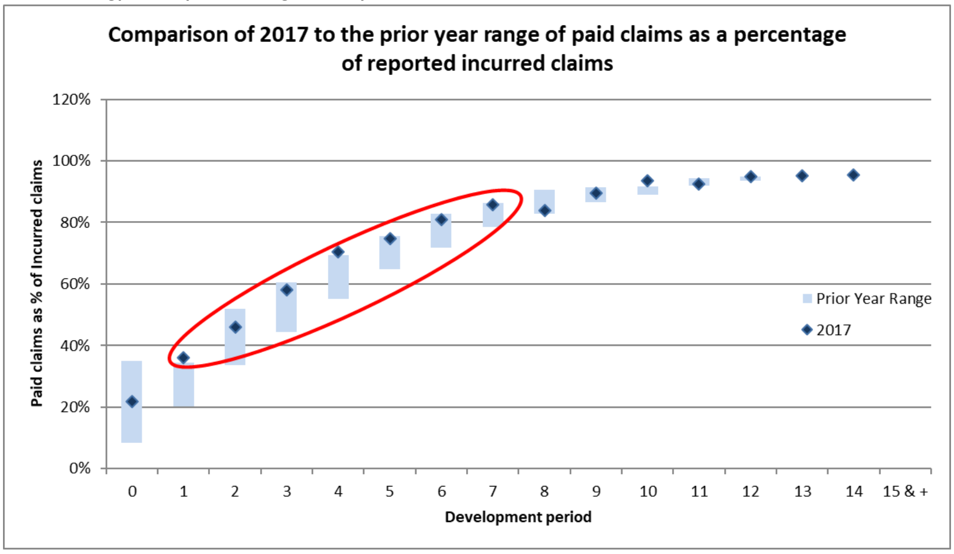
Prior year releases: We observed some examples of prior year releases offsetting poor experience on recent years of account. However, we have identified that the challenging market conditions, together with other financial pressures on firms, may lead to less prudent reserving at both the individual case reserve (IBNER)[8] and IBNR[9] level. The availability of offsetting prior year releases may therefore diminish, cease, or even be replaced by a need for the topping-up of reserves, which has been observed for some firms. We often observed a lack of explanation of assumed material differences in experience between prior and recent years of account: this lack of transparency may be a barrier to sound decision making within firms.

Large claims reserves: Some of the casualty accounts were dominated by low frequency, high severity claims, the development of which was not being allowed for in triangular methodologies or initial expected loss ratios. While it was appropriate that estimates by the claims team were taken into account when informing a view of appropriate IBNER reserve estimates, we observed over-reliance on these estimates in instances where the claims experience had continued to deteriorate. We recommend that firms take a proactive approach to ensuring that reserves for large claims are sufficient and that appropriate methodologies (eg analysis of exposures), use of expert judgement, and wider sources of information are considered, to make a balanced judgement and test the potential for future deteriorations.

Claims inflation adequacy: We observed limited explicit allowance for future claims inflation. This merits greater emphasis given how inflationary changes can materially impact long-tailed business.

Paid claims and claims handling: We observed examples of changes in internal claims handling processes. Some firms only analysed the development of incurred claims, and projections of paid claims were not considered. Others projected both paid and incurred claims, but did not investigate material differences between these. We remind firms that any changes in case reserving processes (as observed in **Figure 3**) may not always be visible when looking only at incurred claims, and that the comparison of paid and incurred metrics may make it easier for firms to identify such trends.

Figure 3: Weakening of case outstanding claims
This illustrates an example of the weakening of case reserve estimates as at year end 2017. For many time periods, the paid to reported incurred claims as at year end 2017 is higher than the paid to incurred at previous year ends (shown by the dark blue diamond being at the top of the light blue bar). This indicates potentially weakening case reserves since a higher paid percentage versus previous years means the case reserves percentage is reducing (ie weakening) as a percentage of reported incurred claims.



Source: Analysis of SII General Liability triangles as at year end 2017 for a sample of firms.

Similarly, allowances made due to changes in the strength of case reserving or timing of claims reporting should be supported by credible analysis given the importance of these assumptions. We saw instances where increasing the assumed claims reporting speed by one year caused a 20% reduction in reserves.

Class specific commentary: The observations noted above are applicable to all classes of business included within our review. We highlight observations for specific classes where these points are particularly pertinent:

- **Financial and professional lines:** These lines have generally been performing worse than expected and showed evidence of the IELR assumptions being optimistic for recent years of account, based on portfolio re-underwriting. These instances of re-underwriting are consistent with the analysis and observations from our monitoring-the-market questionnaire in our letter of June 2017[10] which indicated that new business comprises around 35% of total market premium. However, our findings also indicated that rating adequacy for new business was around 10-15% lower than for renewal business, meaning the reserving experience for new business is likely to be 10-15% worse than similar business already underwritten. Financial lines classes are particularly prone to reserve volatility due to the emergence of infrequent large claims (professional lines are more attritional) and heavy reliance is placed upon current estimates from claims handlers. Proactive work is therefore needed to ensure the sufficiency of reserves for these large claims, as set out above.

- **General and other liability (excluding motor vehicle liability):** These classes have generally seen a lot of re-underwriting, as well as the writing of new sub-classes such as cyber. This is again consistent with our analysis and observations which indicated that firms are writing increasing volumes of new business, leading to greater ‘churn’ in the market. The newer portfolios may be more prone to reserve deteriorations since firms have limited historical experience from which to price and benchmark the classes. Firms have also been diversifying into higher excess business where there is greater scope for later emergence of claims and consequent deterioration within the development ‘tail’. For example, some of the portfolios we reviewed showed that a small increase in tail assumptions could lead to a large deterioration in reserves. We often observed examples of results based on methodologies that did not incorporate appropriate allowance for the late emergence of large claims as set out above.

Governance, board engagement and challenge: We observed examples of appropriate reserving governance, though there were instances of the use of pricing or business plan loss ratios with limited assessment of reasonableness by the reserving actuaries. As mentioned above, it was not always clear whether appropriateness of assumptions for remediated or new portfolios were shared with the board. Similarly, differences in business planning views, between reserving actuaries and the pricing or underwriting teams, were not communicated upwards. We will be looking for evidence of open and challenging discussion of the realism in business planning assumptions in our future work.

We also note that, due to either timing differences or differences in views, the business planning loss ratios and capital estimates may not be reflective of the most up-to-date reserving experience, leading to inappropriate capital being held by firms at a given point in time. This is an area where we may perform more detailed work in the future.

If you would like to discuss the content of this letter, please speak to your usual supervisory contact in the first instance.

Yours sincerely

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[1] 'Letter on review of Actuarial Function Reports in general insurance firms': www.bankofengland.co.uk/prudential-regulation/letter/2018/review-of-actuarial-function-reports-in-general-insurance-firms.

[2] Characterised by the belief that the parts of something are intimately interconnected and explicable only by reference to the whole.

[3] 'Re-Underwriting' is the practice of reviewing a portfolio of insurance contracts, in order to improve its expected performance. This may involve the non-renewal of unprofitable contracts or sufficient changes to terms and conditions, including premium rates, to achieve this.

[4] 'Letter from Anna Sweeney: Market conditions facing specialist general insurers: Feedback from recent PRA review work'; www.bankofengland.co.uk/prudential-regulation/letter/2018/market-conditions-facing-specialist-general-insurers-feedback-from-recent-pra-review-work.

[5] These are set out at 6.1 in the Conditions Governing Business (eg expressing an opinion on underwriting and contribute to firms' system of governance).

[6] See endnote 4.

[7] Article 272 (6)(a) of Commission Delegated Regulation (EU) 2015/35.

[8] Incurred but not enough reported.

[9] Incurred but not reported.

[10] 'Letter from David Rule: Analysis and observations from monitoring-the-market questionnaire': www.bankofengland.co.uk/prudential-regulation/letter/2017/letter-from-david-rule-analysis-and-observations-from-monitoring-the-market-questionnaire.