# INSTITUTE AND FACULTY OF ACTUARIES

# EXAMINERS' REPORT

September 2018

## Subject SA3 – General Insurance: Specialist Applications

**Introduction**

The Examiners' Report is written by the Principal Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Mike Hammer
Chair of the Board of Examiners
December 2018

## A. General comments on the *aims of this subject and how it is marked*

1. The aim of the General Insurance Specialist Applications subject is to instil in successful candidates the ability to apply knowledge of the United Kingdom general insurance environment and the principles of actuarial practice to providers of general insurance in the United Kingdom.

2. Our expectation of a passing candidate at this stage is that, broadly, they should appear capable of stepping up to a head of function (pricing / reserving / capital) role at a small-mid sized organisation or being a senior member of a function team at a larger organisation. They should demonstrate not only a grasp of the technical aspects of general insurance actuarial work, but should also a good sense for products, the competitive marketplace, regulatory environments and the operational aspects of an insurance company. They should be able to pull these areas of understanding together to provide well rounded advice to the users of their services.

3. Consistent with previous examiners' reports, we would offer candidates two key pieces of advice – (i) read the question properly and (ii) take the time to actually think about what is going on. Further to previous reports, we would stress that candidates do not need to get the majority of the points included in this report in order to pass (there are significantly more than 100 marks available for the points in this report). Time spent making sure that you are answering the question that is asked is therefore more valuable than a panicked rush to put down as many points as possible, regardless of whether they are relevant.

4. On the first issue, candidates should always work on the assumption that the question wording has been carefully chosen. It is therefore essential to read the question properly.

5. If something is not asked for then candidates will waste valuable time writing answers that will gain no marks. These broader answers may be a logical next step to the question and so may be appropriate for candidates to discuss in a professional context. This is an exam however with a finite number of marks available and so the scope must necessarily be limited and specifically defined.

6. If a question does specifically mention something, candidates should also assume that there are definitely marks available for this aspect of the question. During the exam setting process, any content that is superfluous will have been removed. A clear implication of that is that if there are numbers provided in the question paper then there are marks available for comment and consideration of those numbers.

7. Wording of question sections should also be considered in the context of the position within the overall question. Where new question information is provided between sections, candidates should recognise that this information is specifically relevant to the following section or sections. When answering preceding question sections, candidates should not consider any subsequent information in their answers (although it may cover similar ground).

8. Various examples from this paper of recurrent failure to read the question are noted below. On the second issue, candidates should note that SA3 is the key paper at which we test candidates' broader thinking. This is generally the final paper before qualifying as a professional, and we consider a capacity for broader thinking to be one of the best indicators of a candidate's suitability to act in a professional capacity once qualified.

9. As such we aim to design exam papers so that it is difficult to pass without displaying some capacity for independent and broad thinking, as well as to heavily reward instances where these skills are displayed. When reviewing past papers, candidates should assume that the marks available for generic points are substantially less than those awarded for the more challenging points that would be the mark of high quality professional insight in a practising actuary. Marks available for list items from bookwork are lower still.

10. We strongly recommend that candidates step back and take the time to thoroughly think about what is actually going on in question situations proposed rather than simply considering numbers to be analysed with standard techniques. For example, candidates might stop to think about what claims actually are for a particular class of business, considering factors such as what actually causes the claim, who brings the claim, how it is dealt with once brought, what makes one claim small while another is substantial etc.

11. This more grounded, real world perspective will help candidates to consider such things as practical issues, stakeholders involved and their potentially diverging objectives, wider impacts, regulatory or ethical issues, inappropriateness of certain actuarial techniques for the specific situation, current economic or cyclical effects etc. This is likely to lead to significantly broader point generation (and indeed reflects the thought processes of the examiners in drafting the questions and solutions) and a more rounded understanding of the underlying risks and dynamics which should also be of value to candidates when dealing with different stakeholders in their professional life.

12. Again, some examples of this failure to think more widely on the current paper are below. More generally, we would also advise candidates to employ basic exam techniques such as well structured answers and effective time management.

13. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

## B. General comments on *student performance in this diet of the examination*

Performance in this paper was lower than we have seen for a number of years.

Candidates appeared underprepared for the knowledge based marks on the ORSA in question 1. The majority of candidates also struggled with the reserving content in question 3, reverting to generic points for triangulation approaches in spite of the product in question being unsuitable for such methods.

Finally, many candidates hadn't given enough thought to the additional exacerbating factors currently affecting the market. Most candidates showed a lack of cynicism on the final part of question 4 and made great effort to try and justify why the market level observations might be entirely valid. Unfortunately the observations (based on actual comments made by Lloyd's and the PRA) are much more likely to reflect flawed or intentionally misleading rate reporting by market participants, and almost all the available marks were for commenting on these issues.

Performance was generally good on Question 2.

## C. Pass mark

The Pass Mark for this exam was 55.

**Solutions**

# Q1

i. ORSA stands for Own Risk and Solvency Assessment [½]
Defined by EIOPA as "the entirety of the processes and procedures [½]
. . . employed to identify, assess, monitor, manage and report… [½]
…the short and long term risks an insurance undertaking faces or may face… [½]
…and to determine the own funds necessary to ensure that the undertaking's overall solvency needs are met at all times." [½]
Part of pillar II [½]

[2, max 2]

ii. Main requirements:
- each insurance company should identify all risks and related risk management processes and controls [½]
- should include qualitative risks that might not have been assessed under Pillar 1 (e.g. reputational risk) [½]
- quantify its ability to continue to meet the MCR and SCR over the business planning horizon (3-5 years) allowing for new business [½]
- quantification doesn't need to be at a prescribed confidence level but tailored to the company (e.g. stated risk appetite and/or to achieve a target credit rating) [½]
- evidence needs to be provided to supervisor showing use by senior management and impact considered in strategic decisions [½]
- an ORSA policy in place [½]
- perform regularly (at least annually) and without delay following any significant change in risk profile [½]
- requirement to inform the supervisor of results of each ORSA [½]
- process and outcome should be documented and independently assessed [½]

Key areas to be justified:
- Methodology and assumptions [½]
- Results and sensitivity of results to assumptions [½]
- Appropriateness of methodology used [½]
- Sources of data and systems and controls around the data [½]
- Approach for dealing with parameter uncertainty and fluctuations [½]

[7, max 5]

iii. Main components:
- assessment of overall solvency needs (considering specific risk profile, approved risk tolerance limits and business strategy) [½]
- compliance, on a continuous basis, with capital requirements and requirements regarding technical provisions [½]
- consideration of the extent to which risk profile deviates from assumptions underlying SCR [½]

Documentation:
- description of areas included [½]
- description of process of conducting the ORSA and responsibilities of key personnel [1]
- assessment of change since last valuation [½]
- stress tests used and their results [½]

- amount of overall solvency needs and financial condition of the undertaking including sign off by the administrative or management body [½]
- strategies for raising additional own funds where necessary [½]
- a description of the independent assessment and results of the last assessment [½]
- the frequency and contents of internal reporting [½]

[5, max 3]

iv. As the insurer is moving into a new market, it might be expected that a new ORSA would include emerging risks specific to this new market… [½]
…as well as any risks to its medium term business strategy [½]
Examples:
- motor business growth based on niche product strategy (over 50s) but possible that age may not be allowed to be a rating factor in the future in the same way as gender is no longer allowed to be. [1]
- changes in the UK market setting of bodily injury claims (PPOs or Ogden Discount Rate) may impact other European territories if similar legislation is enacted. [1]

*Marks available for other examples with appropriate explanation provided tailored to the new business*

[3, max 2]
[Total 12]

*Generally this question was not well answered. There was a lot of confusion between the ORSA and the actuarial function report, SFCR, or any SCR reporting or validation. There were also some efforts to use the words "Solvency", "Risk" and "Assessment" (although not for some reason "own") in many separate sentences.. Many candidates wrote a lot of non-scoring content.*

*Marks were awarded across (i) – (iii) for appropriate points being made in other answer sections.*

*In (iv) many candidates seemed to miss the word "non-quantitative" in the question*

# Q2

i. Advantages

Easier to do business in other countries … [½]
… as do not need to comply with multiple sets of legislation [½]
Leads to greater competition [½]
Which should lead to greater innovation [½]
And reducing cost of doing business in other countries [½]
Greater choice for consumers [½]
and lower cost for consumers [1]
Makes comparisons easier [½]
Confidence in the market [½]
Easier oversight for regulators [½]

Disadvantages

One size does not fit all [½]
Larger countries may push for terms that suit them [½]
Still may have issues with currency fluctuations (if not just one currency) [½]
Harder to change [½]
May require higher skills from some regulators [½]
Greater competition may be issue for local insurers [½]
*Additional marks available for other generic points*

[10, max 5]

ii. Is there enough time to make changes? [1]
. . . and skilled resource to make changes [1]
. . . both at regulators and at companies that will need to implement any new legislation [1]
May conflict with other change programmes [1]
Maybe already be extensively prepared for depending on the expected result of the vote [1]
Cost of setting and maintaining new legislation [1]
Regulatory oversight & enforcement pre and post change [1]
Reporting requirements post change [1]
Ensure changes don't undermine objectives of regulator e.g. consumer protection [1]
Any fee payable for continued use of FTZ legislation [1]
Will they continue to trade with FTZ countries? [1]
How will disputes be resolved after leaving the FTZ [1]
Who will main trading partners be going forwards? [1]
And would mirroring their legislation be appropriate? [1]
How is FTZ legislation viewed, i.e. will tweaks be made or a whole scale review? [1]

Could mirror FTZ legislation in part [1]
What pressure will there be from Companies to make/resist changes? [1]
And from Unions? [1]
Is a transition period possible? And if so, for how long? [1]
If there is any increase to capital requirements then there could be challenges for some insurers in meeting the new requirements [1]
. . . this could apply at overall market or to particular lines of business [1]

*Credit for other valid points*

[24, max 8]

iii. Probably lower cost to continue with the status quo [1]
. . and greater stability [1]
May be useful as a transitional arrangement if one year is deemed to be too short a period to frame appropriate legislation [1]
If legislation is held relatively consistent then there may be minimal differences from maintaining the previous requirements [1]
Relative advantages / disadvantages will depend on differences between legislation [1]
Political risk, i.e. people voted for something different [1]
. . . although this is unlikely to be a material factor in the overall decision to leave the FTZ [1]
May be appropriate if large amounts of trade with countries from the FTZ is anticipated going forwards [1]
FTZ may impose unreasonable costs for continued pseudo membership [1]
. . . or amend regulation to skew against country U who no longer has influence over regulation [1]
May alienate potential non-FTZ trading partners [1]
*Credit for re-using points from (i) at half per mark* *2*

[10, max 5]

[Total 18]

*Generally fairly well answered. Some candidates showed awareness of recent market issues with some additional credit for mentioning issues such as contract continuity.*

# Q3

i. Product expected to be profitable – premiums exceeding claim costs and expenses. [1]
Insurer may be aware of the product being sold in other jurisdictions, and understand it to be successful there. [1]
Other insurers (in the same jurisdiction) may be selling the product, and the insurer may wish to compete. [1]
. . . or no competition with good margins [½]
Easy to adminster [½]
Low capital [½]
Low reinsurance needs [½]

Publicity – the insurer may expect the launch to result in favourable publicity. [1]
The product may cause the insurer to be seen to be innovative. [½]

Product may help insurer establish a relationship with a target group of customers. [1]

In particular, the insurer will identify and establish a commercial relationship with newly married couples, who may go on to purchase other (traditional) insurances. [1]
Credit for other valid points

[9 ½, max 4]

ii. Anti-selection refers to an asymmetry of information between policyholder and insurer where the former has more knowledge of the negative aspects of the risks presented than has the latter.

[1, max 1]

iii. Given low premium, some policies may be purchased for "fun", with a claim being very unlikely. [1]
<Example of a purchase which is very unlikely to result in a claim> [½]
Reasonable to assume that most people buying the product do so because they are in a relationship, which at least one partner considers may end in marriage. [1]
Some couples may be near certain that will claim, e.g., have planned a wedding in the 3-10 year window. [1]
There is nothing to stop such a couple purchasing the policy, paying $50 and claiming $500, so clearly risk of anti-selection. [1]
The key protections against anti-selection are the 3 year waiting period, [1]
and the relatively small sum insured. [1]
Once people decide to get married, they generally do so in less than 3 years. [½]
Unlikely to choose to delay marriage for 3 years for only $500 (although may be other reasons). [1]
Unlikely a couple will marry just to claim $500. [1]
Can only buy one per couple [1]
Even if the policyholder considers marriage is highly likely (or certain) when a policy is purchased, it is not certain the marriage will go ahead, as relationship may be broken off. [1]
Even if there is anti-selection and underwriting losses, it does not necessarily follow should not write this product. [1]

There may be other reasons for launching the product. [½]
E.g., customer relationships, publicity (or other reason) [½]
*Credit for other valid suggestions*

[14, max 8]

iv. Outstanding claims reserve [½]
The reserve set up in respect of the liability for all outstanding claims, whether reported or not. [½]

Unearned premium reserve (UPR) [½]

The amount set aside from premiums written before the accounting date to cover risks incurred after that date. [½]

Additional reserve (provision) for unexpired risk [½]

The reserve held in excess of the unearned premium reserve, which allows for any expectation that the unearned premium reserve will be insufficient to cover the cost of claims and expenses incurred during the period of unexpired risk. [½]

Unallocated loss adjustment expense / claims handling expense [½]

The expenses incurred in handling and settling claims [½]

Possibly tax reserves, such as current or deferred tax liabilities (with definition) [½]

If reinsurance is purchased, provisions may be net of reinsurance or separate reinsurance provisions shown. [½]

[5, max 3]

v. *General comments*
Consider materiality in determining the approaches to be applied. [1]

Provisions may be immaterial if the number of sales is very small. [½]

Or even if there are a large number of sales, liabilities may immaterial in the context of a large insurer's liabilities. [½]

The extent of the investigations undertaken will depend on materiality. [½]
If it can be established that liabilities are immaterial, the actuary should tend towards simpler methods, as the difference between actual and expected costs is unlikely to be significant. [½]

More detailed analysis will be necessary if liabilities are likely to be material, in order to improve the expected accuracy of the liability estimates. [½]

Consider the approach used in previous financial accounts. [1]

This approach can possibly continue to be used if it appears reasonable, given experience to date. [½]

Consider benchmarks/guidance on approach from other insurers [1]

Consider benchmarks/guidance on approach from a reinsurer (if any) [½]

Consider standard market practice (if any has been establish) [½]

Consider any relevant professional guidance [1]

Consider legal requirements [½]

Consider relevant accounting standards [1]

In particular, consider IFRS 17 requirements, which are different for short and long term contracts (such as this) [1]

Consult the company's auditor [½]

The extent of guidance/benchmarks available will depend on the size of the market for this product, both locally and overseas. [1]

For highly unusual products, there may be limited (or no) guidance available, and actuary may need to develop a new, bespoke reserving approach. [1]

Outstanding claims
Claim has occurred once someone has actually got married. [½]

Claims are outstanding between the date someone gets married, and the claim being notified to and paid by insurer. [½]

If there have been any claims to date, use this data to estimate reporting delay. [1]

Could consider data on claim delays for similar products, for example, average delay for small claims such as lost luggage or extended warranty. [½]

Outstanding claims likely to be small – delay assumption not material. [1]

Could just assume some short delay (e.g. a month after wedding) and factor into calculation. [½]

The amount of analysis that is possible will depend on the volumes of claims. [½]

Could count the number of claims on hand (waiting to be processed), and apply a grossing up factor to allow for IBNR. [½]

Time limits may be written in to policy in which claim must be submitted. [½]

Otherwise, may require an allowance for claims where a wedding occurs and the claim is not submitted for many years. [½]

No outstanding claims for the first three years, as no claim possible in this period. [½]

Does not appear to be any requirement for a reserve for re-opened claims, as there is a single $500 benefit if a wedding has occurred. [½]

No IBNER requirement for the same reason. [½]

Unearned premium

Need to consider whether there will be a deficiency on unearned premium. [1]

Need to estimate frequency of policies which will result in a claim. [½]

May be able to measure the proportion of relationships which end in marriage, e.g., by survey [1]

Or the proportion of committed relationships / long term relationships when end in marriage [½]

However doesn't allow for the fact that the propensity to marry of people who buy the insurance is likely to be higher than for the general population. [1]

This select impact will be very difficult to estimate accurately in the absence of credible claims data, which will take several years to be gathered. [1]

Claim amount is known - $500. [½]

Timing is uncertain as can be paid between three and ten years. [½]

Need to assume an average delay to payment, or a payment pattern. [½]

This will allow an estimate of the proportion of premium for each policy which has been earned at any point in time. [1]

Initially all the premium will be unearned (no claims possible for three years). [½]

All premium can be earned after 10 years. [½]

Once a claim has been paid in respect of a particular policy, no further claims are possible and any unearned premium can be released. [1]

Consider average time between meeting a partner and getting married. [1]

And the distribution of this delay period. [½]

This will overstated the average delay, as this measure doesn't include people who don't get married (and therefore can't claim). [1]

Also average assumption may not be typical of group who buys insurance, as above.[½]

This analysis may suggest premiums should not be earned linearly between 3 and 10 years. [1]

For example, if research suggests people are more likely to marry 3-4 years after taking out insurance, than 9-10 years later (or other example). [1]

Company may decide to earn premium linearly in the absence of data to suggest otherwise. [1]

System constraints may also cause the company to favour a linear earning pattern after year 3, in the absence of evidence to the contrary. [1]

A simulation model may be able to assist with the estimates, i.e., for each policy estimate the probability of marriage at various durations. [1]

Other reserves (or components of reserves)
Include allowance for claims handling expenses [1]

Possibly a fixed percentage loading, or an estimated cost per claim (or other example) [½]

May be relatively high, given the small premium amounts and claim size [½]

Include allowance for reinsurance, reflecting the types of reinsurance held (if any) [½]

Include allowance for tax, if applicable. [½]
*Credit for other valid points*

[45, max 15]
[Total 31]

*Most candidates did pretty well on the first parts of this question, however there were some who were unaware of the difference between anti-selection, moral hazard and fraud (these are key concepts that will come up regularly in exams).*

*Most candidates were not thinking in GAAP terms when considering the reserves.*

*Answers to part (v) were poor in spite of a very large number of marks available. As noted above many candidates tried to force a generic triangulation method set of points into this question in spite of its unsuitability for this product at this stage of maturity. Many candidates also used the word stochastic inappropiately.,*

*We would point out to candidates that the preceding part of the question was meant to steer candidates towards thinking in manageable components:*

- *OS easy as fixed benefit*
- *No IBNER*
- *IBNR we gave credit for any sensible comment on reporting delay & frequency*
- *UPR (GAAP basis) needs a view on earnings (lots of marks available for considering non-linearity)*
- *URR needs a loss ratio view, marks available for any sensible comments on frequency*

# Q4

i. In the past it has been observed that insurance premium rates have varied in ways that do not reflect the underlying cost of providing the insurance. [1]

This is most common in large commercial and industrial insurance; for example, that placed in the London Market, [1]

but it affects all classes of insurance. [½]

Insurance is generally highly profitable. [½]

This position is commonly known as a hard market. [½]

The level of profits attracts new entrants to the market [½]

and encourages existing insurers to write more business. [½]

To fill the extra capacity, premium rates are reduced to attract business. [½]

Eventually premium rates fall to the extent that insurance is generally loss-making. [1]

This position is commonly known as a soft market. [½]

Insurers leave the market in response to the level of losses, [½]

or reduce the amount of business they write. [½]

With restricted availability of insurance, premium rates increase. [½]

Eventually premium rates rise to the extent that insurance is generally highly profitable. [½]

It should be noted that an insurer's ability to write insurance is limited by the amount of capital that it holds. [½]

While the prospect of an extremely profitable market will attract new capital that may be subscribed to existing companies and new companies, [½]

a profitable market in itself increases insurers' capital bases as retained profits increase capital holdings. [1]

Since the same effects apply to reinsurers, reinsurance is also likely to become available on easier terms, which increases insurers' ability to write business. [1]

The actual mechanisms that reduce the size of the market when it is unprofitable will be:
companies becoming insolvent [½]
companies withdrawing as a reaction to unprofitability because of unwillingness to accept continuing loss [½]

reinsurance being less readily available [½]

In the past, soft markets have often ended when a major disaster triggered severe losses at a time when premium levels would not support the normal level of claims. [1]

Examples of this are Hurricane Andrew in 1992 and the terrorist attacks of September 2001 (as well as some other substantial losses earlier in that year). [1]

The reasons for the existence of the cycle are much debated. [½]

Insurance is an industry in which barriers to entry are generally low. [½]

Authorisation is a significant process in most countries, but if a new company can demonstrate capital sufficiency and technical competence, it will usually be authorised fairly quickly. [½]

Setting up in business does not require the establishment of specialised plant and equipment or much development of resources. [½]

This leads to a situation in which capital providers can quickly move into the sector. [½]

Another key factor contributing to the existence of the cycle is the delay between writing business and knowing how profitable it is. [½]

Simplistic capital regimes may exacerbate the cycle. [½]

In many jurisdictions, at least until recently, the capital required to write an insurance policy depended on the premium. [½]

This meant that it required less commitment of capital to write a policy if it was under-priced than it would have done have it been overpriced, the exact opposite of what risk-based considerations would merit. [1]

This means that companies can write more business – in terms of the amount of risk taken on rather than the amount of premium written – as premium rates fall. [1]

Conversely, as premium rates rise they must restrict the amount of risk taken on unless they can raise more capital. [1]

This exacerbates the difficulty of finding cover and will tend to drive premium rates even higher. [½]

The economics of insurance business may also help to enforce the cycle. [½]
Insurers' overheads tend to be, if not fixed, then less variable than premium rates. [½]

There may be little or no cost saving (apart from commission) from an insurer not writing a policy. [½]

Therefore if business at least covers its claims cost it may be marginally profitable for an insurer to write it, even if business overall makes losses. [½]
However, in the depths of soft markets, it is common for business to fail to do even this. [½]

Insurers sometimes do not want to lose market share because of the cost of acquiring the business again in the future, loss of reputation and other reasons [1]
Cycle can be at different stages for different lines of business [½]
. . . or territories [½]

Reserving cycle effects may interact with the timing and depth of the underwriting cycle [1]

Terms and conditions often vary over the cycle, weakening in softer market conditions [1]
Policy duration can lengthen in soft markets as insurers / brokers look to lock in low rates [1]

Reinsurance rates often turn first and drive increases in direct pricing [1]

Soft market conditions can give greater leverage to brokers and delegated underwriters with access to market conditions [1]
. . . this can impact commission levels / extent of facilitisation [1]
. . . although soft market conditions impact these entities profitability as well [1]

Other sensible relevant comment [½]
Other sensible relevant comment [½]
Other sensible relevant comment [½]
Other sensible relevant comment [½]
Other sensible relevant comment [½]
[36, max 11]

ii. **Lack of large claim or CAT activity** [1]
. . . hardening of the market is often driven by major market events [½]
. . . that use up existing free capital requiring additional capital to be raised to maintain solvency levels [½]
. . . as well as potentially impacting the appetite of capital providers to enter the market as it highlights the inherent risks of insurance business [½]
. . . although the potential for rate improvements may actually increase capital provider appetite after an event provided the event does not change their perception of the risk profile [½]
. . . a prolonged period of benign claims activity may distort the reasonable performance expectations of underwriters, management and regulators [½]
. . . particularly if monitoring processes do not appropriately adjust for a more normal level of loss activity [½]
. . . benign major loss activity is likely to be particularly beneficial to reinsurers which may make reinsurance rates sufficiently favourable that many insurers can take on higher levels of risk knowing that it is ceded away [½]

**Low returns available on other investments** [1]
. . . global interest rates have been at historic lows for a sustained period with negative real rates in a number of instances [1]
. . . this reduces the attractiveness of other investments [½]
. . . and the expected return on capital for investors [½]
. . . who are driven to take on ever greater level of risks in pursuit of yield [½]

**Growth in alternative risk transfer / alternative capital** **[1]**
. . . ILS have become significantly more prevalent [1]
. . . this is highly flexible capital that can be deployed quickly by the capital markets without needing to commit via an insurance company [1]
. . . it is usually structured to focus on a short term commitment allowing investors to trade in and out rapidly to take advantage of any temporary hardening [1]

**Increasing strength of local markets** [1]
. . . a number of regional markets have become significantly more established in the last decade [1]
. . . Singapore, Dubai or other sensible examples [1]
. . . this increases the level of potential competition with a broader global skill base [1]

**Growth of aggregators or other technology disruption** [1]
. . . aggregators have made it substantially easier for consumers to shop around for the best price [1]
. . . this has reduced persistency levels and average margin [1]
. . . lower barriers to entry for insurers willing to compete on price makes any hardening less sustainable while there is still spare capacity [1]
. . . potentially increasing aggregation impact on commercial markets [1]
. . . other technology is also lowering barriers to entry for disrupters [1]
. . . credit for other sensible comments [1]

**Increased maturity of models / regulation etc.** [1]
. . . the insurance market has substantially improved their own internal modelling and analysis driving greater consistency of rates [1]
. . . lower margins are more viable if the insurer has greater confidence in their rates [1]
. . . fewer major shocks from new regulation with SII relatively well absorbed 1
. . . catastrophe models have been more stable since e.g. v13 impacts [1]
*Marking process only allowed four distinct reasons and supporting commentary*
[27, max 12]

iii. If rates continually soften then at some point it will no longer be possible to write business profitably [1]
. . . arguably the market is already at this point in a number of lines of business [1]
. . . reserve releases on prior years may have allowed insurers to continue to operate and produce sufficient profit [1]
. . . similarly low major loss activity may have allowed insurers to continue to operate profitably just through favourable variation [1]
Any reserve releases from more profitable years are likely to be inherently finite so the quantum of these would be expected to decrease as soft conditions continue [1]

. . . or even go into reverse if there are reserving cycle effects causing the true extent of the soft market to be under reserved for [1]

It is possible for benign major claim or CAT activity to continue indefinitely although this becomes increasingly unlikely [1]
. . . there is no particular reason to believe that genuine CAT exposure has reduced and that any low loss activity is indicative of overstated expectations [1]
. . . climate change and increased building in coastal or other high risk areas would if anything suggest an increased underlying risk profile [1]
. . . market changing large loss activity may potentially be lower than history might suggest [1]
Credit for any sensible comments – e.g. WTC less likely due to anti-terrorist activity, asbestos less likely due to improved regulation etc. [1]

Higher quality insurers may be able to offset declining market rates with improved analysis and risk selection [1]
. . . or technology or other investments to improve their expense base to allow operation with lower margins [1]
. . . or consolidate with other insurers to achieve sufficient scale to improve expense base / pricing expertise [1]

There is likely to be a limit to the benefit that can be gained from these approaches so this is likely to affect timing predominantly [1]

At some point it is almost inevitable that insurers will move into a loss making position that is sufficiently unambiguous that they will not be able to recapitalise regardless of the level of investment returns available elsewhere [1]

This makes some level of hardening of the market almost inevitable [1]
. . . although potentially not until there is a substantial deficit in the pipeline from reserving cycle effects [1]

If analytics or technology has allowed stronger players to operate with lower margins, rates may never harden to a level where weaker players are able to compete as they were in previous hard markets [1]
*Credit for other valid points*

[23, max 9]

*iv.* *Underwriter actions*

It is entirely possible for individual insurers to have different changes in expected profitability than the rest of the market [1]

Active management of the existing portfolio to remove underperforming policies or segments could easily improve profitability even in a declining market [1]

Increased weighting to segments where there is still profit margin can also allow new business or mix change to drive improved profitability [1]

Depending the nature of the rate index (e.g. pure rate change vs risk adjusted rate change) there could also be scope for other underwriter actions to offset rate decreases, e.g. improved policy wording or amended PC terms [1]

Operational changes by the company could also have an impact, e.g. improved claims handling to reduce leakage [1]

At a market level however this does not appear to be a valid outcome [1]

The majority of actions would tend to be zero sum – e.g. poorly performing lapsed business from one insurer is likely to be unprofitable new business for another [1]

*New business*

Generally one would expect renewal business to be better performing than new business [1]
. . . as underwriters will have greater familiarity with the accounts to price them more effectively [1]
. . . and may have some benign margin from any policyholders with good persistency / long term relationships [1]
Costs of renewal may be lower due to greater familiarity [1]

Insurers would normally expect to be competitive on price to attract new business in a soft market [1]

Unless there is a meaningful volume of business genuinely new to the entire market that is profitable (e.g. cyber) this is unlikely to work in practice [1]
Potential anchoring in pricing analysis for renewal business that has seen multiple rate decreases, where new business can be optimistically assessed [1]

Appears to be consistent with the flaws in the other observation effect of aggregate favourable underwriting actions [1]

Suggests that insurers are overestimating the quality of the new business that they are attracting [1]
[15, max 7]
[Total 39]

*Most candidates had the basic knowledge on the underwriting cycle, although it was very common for candidates to score 6-7 marks and miss a number of available points for more in depth comments.*

*Part (ii) of this question was a key distinguisher between strong and weak candidates with all points attracting whole marks and good candidates scoring at or near full marks often without writing that much. Common mistakes were:*

- *Failing to apply bookwork points they'd written down in the preceding question aprt(e.g. a lot of candidates mentioned catastrophe events turning the cycle in part* *(i) but then failed to mention a lack of catastrophe events as a contributor to the current extended soft market)*

- *Many candidates talked about stricter capital requirements, forgetting that companies would still have to meet the requirements after they'd made a loss*
- *Many gave vague answers repeating part (i), e.g. continued soft market due to high levels of competition, without giving any reasons for why market participants might be continuing to compete far longer than in previous cycles*

*In part (iii) most candidates managed some variants on "no it isn't sustainable", but many didn't go much further. Better candidates considered factors that could allow some entities to last longer while still concluding that there are limits to how long that can continue (we hope!)*

*In part (iv) many candidates were too trusting that the observations were valid (even where they seemed to touch on the obvious flaws), while most of the marks were available for challenging the statements. We would advise candidates that just because something is reported doesn't mean it's accurate, and you should always challenge things that don't seem to make sense and consider why people may be (intentionally or otherwise) misreporting their position. A lot of candidates also seemed to have a limited grasp of how the market actually operates, giving little or no consideration to the fact that someone's new business is in most instances someone else's lapsed business.*

## END OF EXAMINERS' REPORT