

6. (1.75 points)

a. (1 point)

An insurer writes personal auto insurance in two states, one of which has a Joint Underwriting Association and the other of which has an Assigned Risk Plan.

Assuming that the insurer has the same market share in both states, and that the size of the residual market is the same in both states:

- i. Briefly describe how the insurer's residual market losses are determined in each state.
- ii. Compare the expected volatility of the insurer's financial results attributable to residual market business in each state.

b. (0.75 point)

Briefly describe how the following items are handled in a state with a Reinsurance Facility:

- i. Assignment of drivers to insurers
- ii. Servicing of claims
- iii. Distribution of operating profits

Common mistakes included:

- Mention of loss adjustment expense as a source of recoveries (even in the context of loss and loss adjustment expense combined).
- Referencing a line of business (e.g. “Workers Compensation”) without any reference to loss recoveries.
- Mentioning that premium is reimbursed but not the unearned portion.
- Identifying the two forms of unearned premium reserve recoveries without reference to loss recoveries.

Part b

Candidates were expected to understand that the policyholder dollar recoveries from the state guaranty fund are limited.

Common mistakes included:

- Interpreting potential delays in guaranty fund payment as a limitation of recovery.
- Mentioning that the guaranty fund could be depleted without specifying any limitations to address this (such as a deductible or a limit).
- Confusing WC high deductible policies with large net worth deductibles.
- Confusing high income with high net worth with respect to the large net worth deductible.
- Mentioning recoveries associated with LAE, general expenses, or dividends.
- Confusing policy limit or deductible with the limit or deductible imposed by the guaranty fund.

Part c

Candidates were expected to provide four arguments either in favor or against the state guaranty fund as an effective backstop for insolvency. Candidates were not required to make a stance for or against guaranty funds, only make a comprehensive argument.

Common mistakes included:

- Evaluating a guaranty fund against the services provided by a solvent insurer. For example:
 - Arguing that recoveries are delayed when seeking money from a guaranty fund when it is faster relative to the bankruptcy process.
 - Arguing that recovery limitations are an argument against guaranty fund but not considering that the bankruptcy process may pay much less.
- Arguing against guaranty fund in that if funds run out, guaranty fund will not provide protection
- Stating that the guaranty fund increases moral hazard but not explaining why.

QUESTION 6

TOTAL POINT VALUE: 1.75

LEARNING OBJECTIVES: B2, B3

SAMPLE ANSWERS

Part a: 1 point

Sample Response for i:

- Under JUA, all losses are pooled and insurer pays portion based on its market share. Under assigned risk plan, insurer is assigned policies based on market share and insurer must pay all losses for those assigned policies.

Sample Response for ii:

- In state with JUA, volatility would be relatively low because the expected losses of the group would have low variance. In the state with assigned risk plan, volatility would be higher because company is assigned a specific subset of the larger group. As such, the subset has a larger volatility than the group as a whole.
- Higher volatility in assigned risk states implies outcomes determined by luck-of-the-draw rather than on the overall residual market results. $\sum \text{Var}(x_i) > \text{Var}(E(x))$
- ARP would have higher volatility, since the insurer's losses (or profits) would be determined by the relatively small number of risks it is assigned, rather than by the results of the residual market as a whole.
- The ARP results would have more volatility due to less data. An individual group of policies (100) would have more variance in losses than 10% of 1000.
- Under JUA, there is a possibility that they could face volatility since the other insurers split the losses of the high risk insureds with this insurer, but since it is based on market share, should be fairly stable. Under ARP however, the high risk insureds they write are random (randomly assigned to insurer based on market share) so financial results are dependent on how lucky they are with the insureds they are assigned. More volatile than JUA.

Part b: 0.75 point

Sample Response for i:

- Insurer accepts all risks, then cedes the insureds that the insurer doesn't want to assume
- Insurers can choose to allocate the applicants/drivers to voluntary market or to reinsurance facility. The drivers do not know.

Sample Response for ii:

- Insurer services all claims

Sample Response for iii:

- Profits are distributed according to the insurer's market share in the voluntary market

EXAMINER'S REPORT

Candidates were expected to demonstrate their knowledge of the Auto Residual Market Mechanisms, specifically regarding Assigned Risk Plans, Joint Underwriting Associations and Reinsurance Facilities. They were expected to demonstrate their knowledge of how

these mechanisms assign losses to insurers and to demonstrate their understanding of volatility.

Part a

For subpart i, candidates were expected to briefly describe how insurers are assigned residual market losses in an Assigned Risk Plan as well as in a Joint Underwriting Association.

A common mistake was mixing up how each of the mechanisms assigns losses to the insurers.

For subpart ii, candidates were expected to say that an insurer's financial results due to a JUA would be less volatile than those results due to an assigned risk plan and to describe why.

Common mistakes included:

1. Claim that an assigned risk plan is less volatile due to the insurer's ability to control claims costs better.
2. Focusing on the possibility of bad results meaning more volatility

Part b

For subpart i, candidates were expected to briefly describe that insurers had the option to keep the risk or cede the risk to the reinsurance facility. Some candidates stated that drivers were not assigned to insurers because the drivers selected the insurers. This answer was accepted as long as the candidate mentioned the insurer could cede drivers to the reinsurance facility in another subpart of the question.

Common mistakes including stating that driver assignment worked like a JUA or an ARP. Another common mistake was the failure to mention the optional cessation of drivers by the primary to the reinsurance facility.

For subpart ii, candidates were expected to identify that the insurer (not the reinsurance facility) serviced the claim.

A common mistake was candidates stating that that reinsurance facility serviced the claim.

For subpart iii, candidates were expected to identify that the all insurers in the state share in the operating profits in proportion to the insurer's market share. A common mistake was candidates stating the insurers shared the operating profits "according to a formula."

Common errors included candidates stating the reinsurance facility kept the profits and candidates stating that insurers shared in the operating profits based on the amount they ceded to the reinsurance facility.

QUESTION 7

TOTAL POINT VALUE: 3

LEARNING OBJECTIVES: B1, B2

SAMPLE ANSWERS

Part a: 1.5 points

Any three of the following reasons:

- Filling insurance needs unmet by private insurance
- Compulsory purchase of insurance
- Convenience
- Greater efficiency or government expertise
- Social purposes
- Regulatory purposes

Sample Responses for “filling insurance needs unmet by private insurance”

- Provide a need unmet by private market. Some risks are considered uninsurable by the private market so coverage is not offered. The government can fulfill this need.
- To provide coverage when it is not available on the open market.
- To fulfill unmet needs of the private insurance market (insurance not available/affordable).

Sample Responses for “compulsory purchase of insurance”

- Mandatory coverage: for required insurance coverages, it is easier for the government to enforce these requirements.
- Compulsory insurance - When it is required for certain LOBs and consumers have the right to have it, the government feels need to provide it.
- Compulsory coverage – The government should participate because it often mandates insurance coverage.

Sample Responses “for convenience”

- It can be more convenient. For example, auto-enrollment means people don’t have to do anything to obtain coverage. This is true for social security.
- Convenient – The government may already have facilities that can easily accommodate insurance operations.
- Convenience – In situations where there are already structures in place to do other governmental work.

Sample Responses “for greater efficiency” or “government expertise”

- If government has more expertise than industry, it will be more efficient (cost wise) for government to deliver insurance
- Efficiency – It may be more cost effective for government to provide the insurance.
- Greater efficiency and/or lower prices because the government doesn’t have to include commission, other expenses, and profit load in prices.