1. (2.25 points)

   a. (1 point)

   Provide one counterargument for each of the following regulatory concerns with using credit-based insurance scores as a rating variable during an economic downturn:

   i. A shift to lower credit scores will result in higher premiums for all insureds.

   ii. A dramatic shift in credit scores will disrupt the current rate relativities, resulting in incorrect individual premiums.

   b. (0.5 point)

   Other than the concerns listed in part a. above, briefly describe two concerns that regulators have expressed regarding the use of credit-based insurance scores in ratemaking.

   c. (0.75 point)

   Identify three actions state regulators can take to limit the use of credit-based insurance scores.

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QUESTION 1

TOTAL POINT VALUE: 2.25	**LEARNING OBJECTIVE: A1**

SAMPLE ANSWERS

Part a: 1 point

Sample 1

i. If all credit scores are lower without changes to relativities and inherent risk, then the actuary will lower the base premium to reflect this shift. Insurers review base premium regularly to stay competitive.

ii. Relativities are also reviewed regularly by actuaries who adjust them accordingly (e.g. relativities between male and female young drivers in auto insurance)

Sample 2

i. Insurance companies can accommodate this shift by adjusting base rates in proportion to the average credit score shift. This will neutralize most premium impacts insureds would see due to a drop in credit score.

ii. Insurance companies can renormalize the relativities and segmentation to account for the new distribution of credit scores. This will ensure that an insured that an insured with an average shift in their credit score will not see their premium change as a result.

Sample 3

i. The pricing actuary will adjust the average premium level to the level before the economic downturn, this will ensure the overall premium level is not excessive.

ii. The pricing actuary will also review the relativities between different credit-based insurance scores groups to make sure the expected loss cost from one group to another are fully reflected in the relativities, this will ensure no premium subsidization occurs.

Part b: 0.5 points

Each of the following responses was granted credit:

- It will affect protected groups as they are usually more affected by credit scores, resulting in unequitable premiums
- Unfairly discriminatory. Credit score may be a proxy for their rating factors like low income, education, religion. Then using credit score may negatively affect certain classes of people.
- It is not clear how credit scores are calculated, so it's another black box added to the process for calculating premiums
- Credit scoring negatively impacts recently divorced, younger, and elderly people when the reason is from things such as never having a credit card before
- Sound financial decisions (paying off debt) can negatively impact CBIS, which seems counterintuitive
- There can be errors in credit reports which aren't the fault of the policyholder
- Studies have shown that up to 50% of credit reports contain errors

- The regulators would be concerned that credit scores may unfairly impact low-income insured who typically have lower credit scores
- It has been observed that only frequency, not severity increases as credit scores decrease, signaling that people with lower scores may just be more likely to file their claims.

Part c: 0.75 points

Each of the following responses was granted credit:

- They can completely ban use of credit based insurance
- Limit use of credit based insurance to underwriting and not rating
- Only allow the use of credit scores for renewals if it reduces policyholder premium
- Prohibit the use of credit-based insurance scores in ratemaking and rating plans
- Only can use credit scores to rate a new business policy, but can’t request score again upon renewal
- Limit the price relativity factors that an insurance company can apply to the premiums based on insurance score, factor capping/limitations
- The state could prohibit credit based insurance score being the sole reason for decisions
- Regulators can require insurers to send out written notice to policyholders that they are to be rated based on credit-scores
- Scrutinize the model used to calculate factors for credit

EXAMINER’S REPORT

For this question candidates were expected to understand credit-based insurance and how it applies to regulation. They were expected to be able to relate credit-based insurance to the recent economic downturn.

Part a

Candidates needed to identify the distributional shift and the need to adjust the overall base rate in part a(i) and in part a(ii) they needed to describe the need to analyze the rate differentials.

A common error was saying that the premium was correct, which was contrary to the scenario presented.

Part b

Candidates were expected to identify two concerns from regulators regarding credit based insurance.

Part c

Candidates needed to identify three actions state regulators can take to limit the use of credit-based insurance scores.

Common errors in this section included:

- Using credit scores to accept or deny applicants. This is not a regulator action.
- Stating that insurers can charge a fine for using credit scores
- Stating that the prior approval process can be used
- Stating that proxy variables can be used

QUESTION 2

TOTAL POINT VALUE: 2 | **LEARNING OBJECTIVE: A1**

SAMPLE ANSWERS

Part a: 1 point

Reasons For

- Since UBI allows the insurer to price premiums more accurately, insurer will be willing to write more insurance and take more risk. This increases the availability of insurance.
- Because insureds can lower their premium by driving less, insurance will become more affordable and they will be able to purchase it.
- It will make pricing more accurate for insurers which allows them to apply more correct rates which will make them financially strong. This will increase competition and cause premium to go down for many insureds (those who are saver than average drivers).
- Younger drivers will be able to receive feedback to improve their driving and reduce their premiums. This will increase affordability for a higher risk driver.
- Drivers have control over the frequency of driving. They can choose to drive less miles which should translate directly to a realized reduction in premium. This improves affordability of personal auto insurance.
- Drivers can choose where and how often they drive. They are more conscious about driving too much and will save money by driving less.

Reasons Against

- Insured will not be able to afford telematics device installation and will choose not to purchase insurance
- It may require policyholders to have a newer car or a smart phone, thus those of lower-income will not benefit from greater affordability of personal auto insurance.
- UBI requires companies to invest in expensive equipment so this cost will eventually pass down to the customers which makes total insurance go up. Insurance is now less affordable.)
- The use of telematics could unfairly penalize insureds in low income/urban areas, because of more dangerous locations and driving times. This could make insurance unaffordable to them
- The drivers who drive more will not see more affordable premiums because their rates won’t be subsidized by drives who drive less.

Part b: 1 point

Any 4 of the following:

- Driving at night, time of day the driving happens, or Driving during high traffic hours
- Speeding