

8. (2 points)

a. (0.75 point)

For each of the following programs, briefly describe a reason for its inception:

- i. State Workers' Compensation Funds
- ii. Crop Insurance
- iii. National Flood Insurance Program (NFIP)

b. (0.75 point)

For each of the following programs, briefly describe the extent of subsidization in its pricing:

- i. State Workers' Compensation Funds
- ii. Crop Insurance
- iii. NFIP

c. (0.5 point)

For NFIP, describe one policy aimed at increasing participation other than subsidization.

SAMPLE ANSWERS AND EXAMINER'S REPORT

Part b

Candidates were expected to explain how reinsurance facilities and TRIA provide stability for insurers in the voluntary market.

Common mistakes include:

- Basing a response on an excess of loss reinsurance contract rather than a reinsurance facility.
- Providing only one side of the reinsurance facility (i.e. either that risks could be ceded or losses were shared rather than describing the entire process.) Both components were needed to explain how stability is brought to the market.
- Stating "TRIA is Government Reinsurance" without explaining the type of loss that is taken by the government and why that would stabilize the market.

Part c

Candidates were expected to describe who the loss sharing participants were and the basic type of sharing that occurred.

Common mistakes include:

- Responses that stated wrong features (for example, stating that the quota share kicks in at \$5 million.)
- Stating "TRIA is reinsurance" which did not give enough information on who the parties involved in the transaction were and what type of "reinsurance" was being provided.

SPRING 2019 EXAM 6US, QUESTION 8

TOTAL POINT VALUE: 2

LEARNING OBJECTIVES: B1, B2

SAMPLE ANSWERS

Part a: 0.75 point

Sample responses for part (i)

- Workers compensation is mandatory; state fund ensures availability to all
- Some employers were unable to obtain coverage in the private market; since WC insurance is mandatory, they needed alternatives or would go out of business
- WC is a mandatory insurance. Some high risk employers might not be able to find coverage in private market
- WC is mandatory for most employers, and there is a fear that they could be out of business if they are denied coverage
- Since WC is compulsory, state funds are making sure there is availability
- To help with coverage availability to employers because WC is a compulsory insurance
- Workers compensation is compulsory, the fund addresses the fear of business owners that they may be forced out of business if they cannot obtain needed coverage
- To ensure that WC insurance is available to employers due to fear they could be put out of business if denied by private insurers, since WC insurance is compulsory
- Some riskier occupations would have availability issues. WC state funds were created in order to alleviate this issue

SAMPLE ANSWERS AND EXAMINER'S REPORT

Sample responses for part (ii)

- Crop insurance was incepted to protect farmers against low crop yields in the event of catastrophic weather
- To protect farmers in the event of a bad crop yield
- To protect farmer against adverse weather events destroying crops, where a need wasn't being met by private insurance
- Established to protect farmers from crop loss due to natural disaster
- Prevent catastrophic losses to farmers due to extreme weather
- To indemnify farmers against low yields or low prices for crops
- Provide coverage option for a need unmet by the private market
- To cover farmers when there are adverse conditions that affect crops such as weather, pests

Sample responses for part (iii)

- Because of the high costs associated with property losses in flood-prone areas, flood coverage was not available
- To fulfill an unmet need as insurers were unwilling to provide
- Private insurers were unwilling to provide coverage for properties in flood prone areas, so alternatives were needed
- To help reduce nationwide flood risk
- To reduce national comprehensive flood risk
- Flood insurance can be considered uninsurable due to its catastrophic nature, so government fulfilled an unmet need where coverage wasn't available
- It solves an availability problem and helps to reduce flood risk
- To reduce the risk of flood across the country by developing risk maps
- To decrease federal costs for floods, and to provide insurance in a market where private insurance is largely unavailable
- To provide flood insurance to people in coastal areas and other flood-prone areas which the private market is unwilling to insure
- Filling an unmet need; increase coverage availability

Part b: 0.75 point

Sample responses for part (i)

- No subsidy
- There is no subsidization
- State funds have no subsidization
- There may be competitive pricing, but there is no pricing subsidization in state WC funds
- No subsidization; actuarial rates used
- Premiums are not subsidized, though they may cost less since state funds do not have some expenses like marketing, commission or profit load
- It's not subsidized but it is offered at a reduced cost thanks to no commissions and marketing expenses
- There is no subsidy; the state WC fund operates like a normal insurer (although may have

SAMPLE ANSWERS AND EXAMINER'S REPORT

less expense)

- No subsidization. WC state funds are self-funding via premium.
- Not subsidized. Pricing is based on expected cost of risk

Sample responses for part (ii)

- Subsidized by federal government
- Government subsidizes premiums paid by farmers
- Insured premium is subsidized
- Rates are subsidized below actuarially sound levels
- Crop insurance is heavily subsidized; policyholders do not pay actuarial rates
- The federal government often subsidizes a portion of the crop insurance premiums for farmers
- Crop insurance has low participation and inadequate rates. It is subsidized by the government.
- Crop insurance receives a direct subsidy from the government to make premiums lower

Sample responses for part (iii)

- Many subsidies in pricing such as community rating systems, grandfathered pricing, newly-mapped
- NFIP has four subsidies: Pre-Firm; Newly Mapped; Grandfather Cross-Subsidy; Community Rating System premium reductions
- A wide variety of subsidies exist such as grandfathering and newly-mapped
- NFIP offers several subsidies such as newly-mapped FIRM, pre-firms, grandfathered FIRMS, and programs to give credit for communities that make changes to limit flood exposure
- NFIP has several subsidies in its pricing, like pre-firm subsidy and grandfathering cross-subsidy
- NFIP provides Pre-FIRM subsidies for structures build before 12/31/74 or before the first flood insurance rate map in the community; Grandfathering subsidies to policies whose flood rate zone was updated (allowing them to keep old rate); and a community rating system giving discounts to communities with better management of standards, responding to floods & informing communities
- There are various subsidies that reduce rates for policyholders such as pre-FIRM subsidy, newly-mapped subsidy, and community rating systems
- Cross-subsidies exist due to programs/incentives like flood map grandfathering
- Government subsidizes premium in several ways

Part c: 0.5 point

Sample 1

- Flood insurance is required to get a federally backed mortgage if you're in SFHA, increasing the number of people who get NFIP

Sample 2

SAMPLE ANSWERS AND EXAMINER'S REPORT

- If a property is in a SFHA, they must participate to be eligible for a federally backed mortgage

Sample 3

- Insureds in lower risk flood zones may apply for preferred rate policies, thereby increasing the insurance pool and spreading risk over a larger population

Sample 4

- PRP (preferred risk policy) – provide coverage to property not in most hazardous area. It has lower premiums due to its lower risk, so this increases participation in NFIP.

Sample 5

- Preferred risk policy (PRP) is offered to properties not in the special flood hazard area (SFHA). This policy is voluntary and is offered at a lower premium to encourage participation in NFIP

Sample 6

- It is a requirement to obtain flood coverage in flood prone areas in order to receive a federally backed mortgage

Sample 7

- Fines were imposed upon financial services companies for ignoring flood insurance requirements for federally backed mortgages on properties in special hazard flood areas

Sample 8

- A property in a flood zone can only receive help from FEMA for disaster relief, if they participate in NFIP

EXAMINER'S REPORT

Candidates were expected to understand the origin and purpose, as well as funding and operations, of government and industry insurance programs.

Part a

Candidates were expected to know a reason for the inception of State Workers Compensation Funds, Crop Insurance and the National Flood Insurance Program (NFIP).

Common mistakes included:

- Confusing the creation of workers compensation state funds with the establishment of workers compensation insurance itself
- Confusing state workers compensation funds with federal workers compensation programs
- Defining types of workers compensation state funds, but not the reason why state funds were incepted
- Mixing up the reasons relating to Crop versus NFIP
- Solely noting "societal benefit" for Crop and/or NFIP

SAMPLE ANSWERS AND EXAMINER'S REPORT

Part b
Candidates were expected to know whether or not the pricing of each program is subsidized, and understand the difference between subsidization and funding.
Common mistakes included: <ul style="list-style-type: none"> • Confusing lower expense component of rates with subsidization • Stating who reinsures the program, which does not answer the question regarding subsidies in pricing • Confusing pricing subsidies with how a program is funded • Stating that rates are not actuarially sound with no further explanation; however, low rates imply possible losses but not subsidization
Part c
Candidates were expected to know which policies are intended to increase participation in the NFIP, and demonstrate understanding of the difference between subsidization and other means of increasing the policy base.
Common mistakes include: <ul style="list-style-type: none"> • Citing subsidization policies • Misinterpreting the question as designing a policy for the NFIP to increase participation

SPRING 2019 EXAM 6US, QUESTION 9	
TOTAL POINT VALUE: 2.25	LEARNING OBJECTIVE: C1
SAMPLE ANSWERS	
Part a: 1.25 points	
Earned Premium = $100 - (150 - 140) = 90$	
Underwriting Income = $90 - 90 * (.35 + .7) - 10 = -14.5$	
Part b: 0.5 point	
Net Investment Income Earned = $50 - 5 = 45$	
Part c: 0.5 point	
<u>Sample responses for part (i)</u> <ul style="list-style-type: none"> • Held at amortized cost • Derivative will be accounted for the same as NAIC 2 Bonds, which is at amortized cost 	
<u>Sample responses for part (ii)</u> <ul style="list-style-type: none"> • No impact to surplus. • There will be no impact as all bonds + this derivative will be still valued at amortized cost. The market value change has no impact. 	
EXAMINER'S REPORT	