

Risk-taking behavior after experiencing a disaster; implications for pensions

“Disaster leads to long-term risk aversion for younger people and hence potential pension loss”

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This study used a well-known standard life cycle model to analyse the influence of a disaster like COVID-19 on the optimal consumption and investment strategy of different generations. The model assumes an individual without higher education, unmarried and no children, and that the disaster affects the risk tolerance. The ages examined were 25, 50 and 75 years. Risk aversion increased after a disaster, and the younger generation was hit the hardest.

Principal Findings

- After a disaster, the younger generation makes fewer financial investments, but due to a lifelong lower consumption, they eventually build up more capital as a buffer for consumption pattern risk.
- A disaster affects the older generation most in terms of an immediate crash in wealth invested in financial markets.
- Certainty equivalents and not financial losses should be used to compare the effects of a disaster on different age groups.
- The effects observed are mainly qualitative because, based on empirical literature, the change in the magnitude of risk aversion following a disaster is not yet clear.

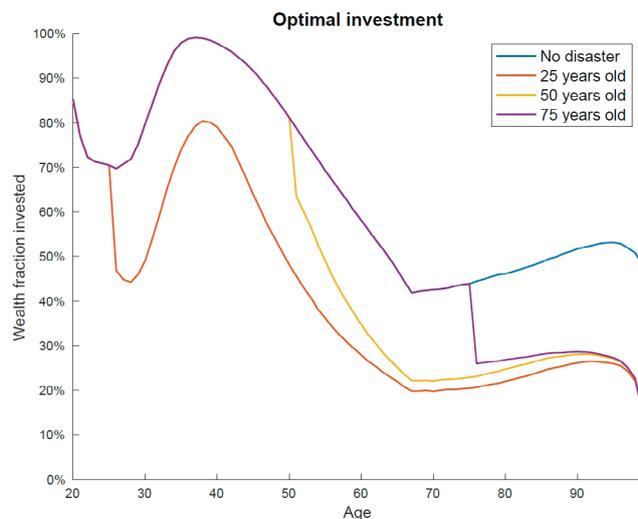


Figure: Optimal investments when experiencing a disaster at different ages when, in addition to standard consequences on income and capital, an increase in risk aversion is also taken into account.

Key Takeaways for the Industry

- If generations are compared in terms of their certainty equivalent, younger generations lose more in utility terms after a disaster.
- Pension providers could consider reducing the aggregate loss in utility due to the COVID-19 pandemic by compensating younger generations at the expense of older generations.



Want to know more? Read the paper

'Risicogedrag na het ervaren van een ramp; implicaties voor pensioenen' (Dutch only)