Comments to the Author  
This is more of an economics look at the problem, rather than actuarial and so may be more appropriately placed in an economics focused journal. Two major assumptions are quite far from standard actuarial practice and insurance experience: 1) high excess insurance has negligible loss ratio; and 2) insured and insurer have same info on loss distribution.  
  
Authors use Sharpe Ratio while actuarial literature has some well established papers using CAPM models. Literature review does not include any actuarial papers, notably Don Mango's "Capital Consumption: An Alternative Methodology for Pricing Reinsurance". Although that paper is for reinsurance it is the same principle and authors need to explain how their result compares to and is an improvement on his well-known work. Another would be Ira Robbin's "Coherent Capital for Treaty ROE Calculations".  
  
Literature review notes evidence and proof of why entities under-insure for low probability events. Does this framework offer proof that could compel some to properly insure those risks?  
  
There is obviously a good idea presented, but to be appropriate for publication in a journal for actuarial science, it needs to be helpful for practicing actuaries. Major revision would be needed, in particular the assumption of zero expected loss is not acceptable, and the literature review needs to cover papers from the actuarial literature regarding capital return pricing methodologies, in particular the Mango and Robbin papers which are well known having won awards and being included in the exam syllabus in the past.