

Extra Credit Writing Assignment on the Insurance Underwriting Cycle, Float, Premium Pricing, and Economic Models within the Property/Casualty Industry

This writing assignment will require that you read the text, review supplemental [weblinks, published papers] and lecture materials, as well as, perform library research related to insurance operations and the P/C insurance underwriting cycle. In your essay on the inter-relationships of underwriting cycles to the use of float, determination of premium rates, reserve development and underwriting guidelines, you will want to address the following questions:

- (1) How do the characteristics of what represents insurable risks influence the underwriting guidelines, types of coverages and premium rates for Property/Casualty insurers [e.g. insurable vs. uninsurable risks]? How might these characteristics impact what may or may not be an insurable risk? For example, in what ways are health insurance risks uniquely different from property insurance such as home, or auto leading to different underwriting and pricing considerations?
- (2) Of the 4 general economic market models, which one might best be used to describe the Property/Casualty insurance industry? As justification for your assertion on the market model please provide arguments related to the economic and market characteristics of the insurance product [e.g. elastic vs. inelastic service, market concentration, pricing behaviors of market participants]? What are the roles capital or policyholder surplus, in addition to reinsurance, play in making the insurance industry more concentrated based on the barriers to entry argument? Which of the 4 general economic market models would best describe the private health insurance industry? What is it about the economic characteristics of health insurance that causes there to be a significant difference between the Property and Casualty, as opposed to health insurance industry?
- (3) How do economic models for the Property and Casualty and the health insurance Industries impact the underwriting for the coverages being offered [e.g. are market participants price takers or price makers, do they follow the herd or alter pricing, if so on what basis]? Why is it important for underwriting and pricing decisions to be made independently of market share considerations [use Buffett's argument to bolster this position]?
- (4) What role does float play in the success of any insurance operation? What role does the imposition of good underwriting and premium/reserve development play to a successful insurance operation? Why does Buffett argue that these two factors, more than anything else, are important to the long term profitability of a property/casualty insurer?
- (5) Why was Buffett so critical of an insurer's using derivatives to manage risks within an insurance operation? Does he provide any context where the use of futures and options might be helpful to a property/casualty insurer? How are derivatives similar to reinsurance, and how are they different? As noted in our 1987 paper:

A. Frank Thompson, Linda Bowyer, and Don Edwards, "A Cross-Sectional Analysis of Interest-Rate Swap Agreements Among FSLIC-Insured Thrift Institutions," Research Working Paper No. 132, Federal Home Loan Bank Board, Washington, D.C., July 1987.

and equally stated by Warren Buffett in his 2002 annual report, <http://www.berkshirehathaway.com/2002ar/2002ar.pdf> currently configured swap arrangements are likely to increase financial institution risks rather than reduced them--- what is it about the nature of the counterparties to these contracts that leads to an expansion in the risk of default?

- (6) Given that insurance underwriting cycles occur from time to time and are detrimental to insurance markets, how might insurance companies avoid becoming part of one of these cycles and losing all kinds of money? If you were working for a property/casualty insurer how might you advise them when faced with the down side of an underwriting cycle with competitors cutting premiums in order to maintain or increase market share? Justify your answers on the basis of your research.