

Tax-Deductible Pre-Event Catastrophe Loss Reserves: The Case of Florida^{1,2}

By

Andreas Milidonis³, Ph.D.

Accounting and Finance Division,
Manchester Business School,
University of Manchester,
Crawford House,
Booth Street East,
Manchester, M13 9PL, U.K.
Tel: +44(0)161-275-3936
Email: Andreas.Milidonis@mbs.ac.uk

Martin F. Grace Ph.D., JD

James S. Kemper Professor of Risk
Management
Department of Risk Management &
Insurance,
Robinson College of Business,
Georgia State University,
Atlanta, GA, 30303, USA.
Tel: +1 404 413-7469;
Email: mgrace@gsu.edu

August 21, 2007

Abstract

After Hurricane Andrew the U.S. Congress entertained proposals to allow insurers to employ tax-deferred loss reserves. Interest was strong at first, but as the events receded interest waned. However, after the most recent severe hurricane seasons the proposals are again being discussed. In this paper we examine the institution of catastrophic loss reserves in a stylized model of insurance provisions. First, we find that the benefits of the tax-deferred loss reserves depend on the actuarial assumptions regarding the expected loss distribution. Second, we make the first attempt at estimating the change in consumer behavior and the social welfare implications for permitting tax deferred loss reserves. In sum, we find under specific circumstances there are large welfare gains for allowing the tax deferral of reserves.

Keywords

Tax-Deferred Loss Reserve; Catastrophe Financing and Pricing; Extreme Value Theory; Mixture model; Insurance; Reinsurance;

¹ This paper will appear ASTIN Bulletin volume 38.1.

² We would like to thank Sam Cox for suggestions on actuarial methodology. We would also like to thank Richard Derrig, Richard Phillips and Tyler Leverty for comments and assistance on an earlier version of the paper and further acknowledge the prompt and valuable help of Mr. Edward N. Trevelyan of the U.S. Census Bureau. Finally, we would like to thank an anonymous referee for his/her insightful comments. All errors or omissions, however, are the authors' responsibility.

³ Contact Author.