Title: The pricing of catastrophe bonds using the CAPM

Author: Fei Su (speaker) and Jan Wenzelburger
Postal address: E4.401s, Crown Place, 200 Brownlow Hill, L3 5UE, Liverpool, UK
Email address: fs650@liv.ac.uk
Tel: 07892828798

Abstract: Catastrophe bonds are insurance linked securities that transfer financial risks of natural hazards from the insurance industry to the financial market. These bonds default when funds are needed to cover insurance claims which are triggered by pre-specified natural hazards. This paper develops a capital asset pricing model to price catastrophe bonds as an innovation to the financial market and investigates the conditions under which natural hazard risks are transferable to the financial market. The effects of transferred insurance risk on equilibrium asset prices, risk allocations, and insurance premia is investigated.

Key words: Catastrophe bonds, Financial Innovation, CAPM