1056-91-2030   **Christian P Traeger***, Department of Agric & Resource Economics, 207 Giannini Hall #3310, University of California, Berkeley, CA 94720-3310. *Risk, Uncertainty and Climate Change Evaluation.* Preliminary report.

Standard economic theory evaluates climate change on basis of a welfare function that is simultaneously additively separable in risk and time. This structure contains an implicit assumption of (intertemporal) risk neutrality, stemming from the assumption that Arrow Pratt risk aversion is equivalent to the aversion to intertemporal consumption fluctuations. Moreover, the standard model cannot capture (second order) uncertainty over probability distributions, an issue that received attention in the recent decision theoretic literature explaining observed differences in the attitude with respect to risk versus ambiguous uncertainty. This paper aims at extending the evaluation of climate change to a setting that permits a more comprehensive treatment of uncertainty accounting for intertemporal risk aversion and ambiguity. (Received September 22, 2009)