Adv. Math. Econ. 14, 99-112 (2010)



## A certain Limit of Iterated Conditional Tail Expectation

## Shigeo KUSUOKA<sup>1</sup>

Graduate School of Mathematical Sciences, The University of Tokyo, Komaba 3-8-1, Meguro-ku, Tokyo 153-8914, Japan

**Received**: June 18, 2009 **Revised**: October 21, 2009

JEL classification: C65. G19

## Mathematical Subject Classification (2000): 60B05

**Abstract.** We consider the continuous limit of iterated Conditional Tail Expectation for a Brownian filtration and show the existence of the limit for some special random variables.

Key words: Risk measure, Value at risk, CTE

 $<sup>^1\</sup>mathrm{research}$  supported by the 21st century COE project, Graduate School of Mathematical Sciences, The University of Tokyo