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Yu. Horizon dependency of utility optimizers in incomplete models.

This paper studies the utility maximization problem with changing time horizons in the incomplete Brownian setting. We show that the dual and primal value functions as well as the optimal terminal wealth are left-continuous with respective to the time horizon T > 0. We exemplify that the expected utility stemming from applying the *T*-horizon optimizer on a shorter time horizon *S* with S < T may not converge as $S \uparrow T$ to the *T*-horizon value. In other words, exiting an optimal strategy before maturity can have severe costs for the investor. Finally, we provide necessary and sufficient conditions preventing the existence of this phenomenon. (Received March 09, 2010)