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Correction to:

OPTION PRICE WHEN THE STOCK IS A SEMIMARTINGALE[1]

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Correction. In Theorem 1 it was tacitly assumed that the function $F(y)$ does not depend on S. Consequently, equations (3) and (4) do not hold in "the most general situation" as claimed in the Introduction. However, equation (5) and the main result equation (11) in Theorem 4 do not rely on this assumption, and hold in general.

Acknowledgement of prior work. As far as I know the main result, equation (11), has not been published elsewhere. However, similar equations have appeared in working papers. Dupire (1996) "A unified theory of volatility" derived a similar equation by purely financial arguments. Andreasen and Carr (2002) "Put Call Reversal" give a similar equation for more general semimartingales that need not be continuous. Savine (2002) "A theory of volatility" derives a similar equation by using Schwarz distributions. The result in Corollary 5 of my paper has appeared in the working paper Andreasen and Carr (2002) ibid., who named it "Put Call Reversal".
I thank Peter Carr for bringing these remarks to my attention, and for a copy of the working paper Dupire (1996).

Comment. A rigorous proof of the main result, Theorem 4 equation (11) is given in my paper under the assumption that the martingale $S_t e^{-rt}$ is of class H^1. This condition was pointed out to me by Jia-An Yan. It does not appear in other works, which were not concerned with rigorous proofs. It is interesting to find out whether this assumption can be removed.

[1]ECP 7(2002) paper no 8.