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ARTICLES

Dollar-Cost Averaging and Prospect Theory Investors: An Explanation for a Popular Investment Strategy

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Dollar-co m step-by-step in r investors were una 95] argues that d vioral finan asset allocatio rable to a lump su n results support onal but a perfectly

Keywor
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Notes

1. Fisher and Statman [1999] use a similar framework to analyze time diversification.

2. See Statman [1995], p. 74.

3. See Tversky and Kahneman [1992], p. 298.

4. As an example, Statman [1995] discusses defined-contribution pension plans, such as 401(k)s, where employees do not have an explicit choice between a lump sum investment and a dollar-cost averaging investment. See Statman [1995], p. 76.

5. Therefore, the results of Frühwirth and Mikula [2008] are not surprising. They compare a 10-year lump sum investment with a 10-year dollar-cost averaging strategy based on yearly payments. With a high equity risk premium, one would expect that the lump sum strategy dominates the dollar-cost averaging strategy over this long time horizon.

6. Prior studies also use a one-year time horizon to analyze dollar-cost averaging (e.g., Williams and Bacon [1993], Thorley [1994], Bacon et al. [1997], Abeysekera and Rosenblo[illegible]othesis that a one-ye[illegible]erformance.

7. Frami[illegible]r decision is presente[illegible]

8. See Ir[illegible]parameter probabil[illegible]

9. Br[illegible]

10. See [illegible]ial properti[illegible]umerical example[illegible]

11. See [illegible]

12. Abeysekera and Rosenbloom [2000] also base their simulations on a 20% annual stock market volatility.

13. See Dimson et al. [2006]. They document a high volatility around 30% p.a. in the German, Italian, and Japanese stock markets over a long period of time (1900–2005).

14. There may be other reference points, for example, the return target derived within an asset-liability analysis for a specific investor. However, such a reference point is highly investor-specific, and the results cannot be generalized. Furthermore, as other studies also use the zero return and the risk-free rate as reference points (e.g., Hens and Bachmann [2008]), we believe that this is a representative choice for our study.

15. For simplification, we implemented a statistical test only for cumulative prospect values.

16. The parameters recommended in Abdellaoui et al. [2005] are also used in the study of Breuer and Perst [2007].

17. The risk-free rates are average values from the Frankfurt money market.

18. As we simulate continuously compounded monthly returns with the geometric Brownian motion, we also analyze the statistical properties of the continuously compounded real return data. In this way, we see the fittings and the differences betwee

19. See 68.

20. Stati ually assume indepen eplacement. In the bl an over

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