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**Paolo Guasoni\*** (guasoni@bu.edu), Boston University, Department of Mathematics and Statistics, 111 Cummington St, Boston, MA 02215, and **Scott Robertson**. *Investing and Pricing for the Long Run*.

Consider an incomplete market with several risky assets, where investment opportunities are driven by, and partially correlated with, a set of economic factors which follow an ergodic diffusion.

For an agent with CRRA utility, and in the limit of a long horizon, the problem of utility maximization from terminal wealth admits simple closed-form solutions for optimal portfolios and their implied risk-premia. Both solutions involve the principal eigenvector of the generator of a Markov process, while the principal eigenvalue represents the optimal utility growth rate.

The calculation of the eigenvector-eigenvalue pair is reduced to the solution of an ODE in the case of one economic factor, while the multidimensional case involves a nonlinear PDE.

Sharp estimates on the finite-horizon performance of long-term strategies are given, and connections to large deviations and risk-sensitive control are discussed. (Received September 10, 2007)