1014-60-193 **Coskun Cetin*** (cetin@usc.edu), 1124 W 29th St. #8, Los Angeles, CA 90007. *Dynamic Fund Portfolio Optimization under Mean-Variance Preferences.* Preliminary report.

We consider a complete financial market with deterministic parameters where a small investor and a fund manager have mean-variance preferences. The investor has short selling constraints and pays proportional fees to the manager. We get the optimal strategies of the agents by martingale duality methods. An optimal fund weight is obtained via a numerical solution of a deterministic nonlinear equation and is not unique in general. In one -dimensional case, the investor's risk is inversely proportional to the weight of the risky asset in the fund. Using this fact, we generalize the problem to the case of multiple managers and provide some examples. (Received August 16, 2005)