1043-62-167   **Stanley L. Sclove*** (`slsclove@uic.edu`), Information & Decision Sciences . (MC 294), University of Illinois at Chicago, 601 S. Morgan St., Chicago, IL 60607-7124. *A Risk-Averse Utility-Function Framework for Rebalancing a Portfolio (Preliminary Report).*

A risk-averse utility function in terms of the mean and variance of portfolio rate of return is discussed. The portfolio mean is the inner product of the weight vector and the mean vector of rates of return. The portfolio variance is a quadratic form in the weight vector, where the matrix of the quadratic form is the covariance matrix of the rates of return. Because the utility explicitly involves the covariance matrix, it is important to model it as well as the mean. Transaction costs are proportional to the L-1 norm of the change in the weight vector. At each time, the problem is to estimate the allocation that maximizes the expected utility, net of transaction costs, at the end of the next period. (Received August 26, 2008)