Linking Momentum Strategies with Single-Period Portfolio Models

John M. Mulvey, Woo Chang Kim, and Mehmet Bilgili Princeton University

Abstract

Several versions of the Markowitz portfolio model are evaluated with respect to patterns in equity markets. Much research has shown that strategies based on momentum have generated superior risk adjusted returns. We form a long-only portfolio of momentum strategies via industry-level assets; the strategy beats many others over numerous markets and time periods and provides a good benchmark for competing optimization models. Simple Markowitz models are quite effective, as long as the proper historical time period is chosen for the stochastic projections. Investment performance of optimal asset allocation models can be improved by considering the momentum effects in the parameter estimation procedures.