Details on the data file for index-based factor returns

Variable definitions

The factors are the returns on long-short (zero net investment) portfolios defined as follows:

s5rf	S&P 500 minus the risk-free rate
r2s5	Russell 2000 minus S&P 500
rms5	Russell Midcap minus S&P 500
r2rm	Russell 2000 minus Russell Midcap
r3vr3g	Russell 3000 Value minus Russell 3000 Growth
s5vs5g	S&P 500 Value minus S&P 500 Growth
rmvrmg	Russell Midcap Value minus Russell Midcap Growth
r2vr2g	Russell 2000 Value minus Russell 2000 Growth
umd	Up minus Down (momentum factor)
rf	Risk-free rate (one-month T-bill rate)

Index-based factor models

Based on Cremers, Petajisto, and Zitzewitz (2008), we recommend the following factor models for performance evaluation. Depending on the application, momentum (umd) could easily be dropped from either model, giving us a three-factor model and six-factor model.

Four factors: s5rf, r2s5, r3vr3g, umd
Seven factors: s5rf, rms5, r2rm, s5vs5g, rmvrmg, r2vr2g, umd

The four-factor model distinguishes between large-caps (S5) and smallcaps (R2). It also includes a value-weighted value factor based on the style components of the Russell 3000, which represents essentially the entire US stock market. The seven-factor model adds midcaps (RM), and it splits the value factor into separate factors for large-caps, midcaps, and smallcaps.

Other details

All index returns are total returns, including dividends. The index returns are from Frank Russell Co. and Standard and Poor's. The momentum factor and risk-free rate are from Kenneth French's website, and they are included here only for the sake of convenience.

Some of the early daily index returns have been computed by the author using index holdings and CRSP daily stock return data.