

Common risk factors in the returns on stocks and bonds (SUMMARY)

5 common risk factors

- 3 stock-market factors: overall market factors, factors related to firm size, book-to-market equity
- 2 bond market factors: maturity, default risk

Noted that stock returns have shared variation in the stock market factors and linked to bond returns through shared variation in the bond market.

- The cross-section of average returns illustrates little relation to the market betas of the Sharpe asset-pricing model and the consumption betas of the intertemporal asset-pricing model.
- Thus, Fama and French study joint roles of market beta, size, E/P, leverage, and book-to-market equity in order to explain the cross-section of average returns.
- This paper extends the asset-pricing tests in Fama and French in three ways.
 1. Expanding the set of returns to common stocks and government corporate bonds
 2. Expanding the set of variables
 3. Using time-series regression to test asset-pricing model.
- Then, get the equation

$$R(t) - RF(t) = a + b[RM(t) - RF(t)] + sSMB(t) + hHML(t) + e(t)$$

where $R(t) - RF(t)$ is risk premium

$RM(t)$ is market return at time t

$SMB(t)$ is the difference between small and large stocks at time t

$HML(t)$ is the difference in returns between high and low BE/ME

- To conclude, the results of expected stock returns can be used to select portfolios, evaluate portfolio performance, and measure abnormal returns.