

Fama French identifies 5 common risk factors which are three stock-market factors and two bond-market factors. The three stock-market factors are an overall market factor, factors related to firm size, and book-to-market equity. The two bond-market factors are related to maturity and default risks.

According to the 1992 paper, Fama French came up with only two factors that affect return: firm size and book-to market equity. Moreover, CAPM did not work well and BE/ME has strong predictability. This paper extends the asset- pricing tests (1992) in three ways. First, expanding the set of asset returns to be explained which are common stock, government bonds, and corporate bonds. Second, expanding the set of variables used to explain returns. Third, the approach to test asset-pricing models is different. Before using cross-section, now using time-series regression of Black, Jensen, and Scholes (1972).

The time-series regressions are convenient for studying two important asset-pricing issues. First, if assets are priced rationally, variables that are related to average returns, such as size and book-to-market equity, must proxy for sensitivity to common risk factors in returns. Second, the time-series regressions use excess as dependent variables and either excess returns or returns on zero-investment portfolios as explanatory variables. The estimated intercepts provide a simple return metric and a formal test of how well different combinations of the common factors capture the cross-section of average returns. In the time-series regressions, the slopes and R-squares values are direct evidence on whether different risk factors capture common variation in bond and stock returns.