

This paper studies five common risk factors that are related to stocks and bonds return. And study how these explanatory variables affect the stocks and bond portfolio whether they can explain the results of this experiment or not. Moreover, they use a time-series regression approach to make the test more precise and convenient to study these issues.

As mentioned above, In this paper they use Three Stock-market factors are RMO, SMB and HML with Two Bond market factors TERM and DEF. RMO is the sum of the intercept and the residuals, zero investment portfolio return which is uncorrelated with 5 explanatory variables. SMB is the difference between the returns on small and big stocks with same weight average book-to-market equity(BE/ME). HML is the difference between the simple average of the returns on the two high BE/ME portfolios and low BE/ME portfolios. TERM is the difference between the monthly long-term government bond return and the one month treasury bill rate. DEF is the difference between the return on a market portfolio of long-term corporate bonds and long-term government bond return. TERM and DEF can be used to explain the cross section of average. All of these variables will show how they can capture the test results. They have constructed 25 portfolios in this test and use their excess return as a dependent variable. A significant test result is in table 8 which represents the five-factor regression that uses this to explain a return of both stocks and bonds with separate roles of five factors and cross-section of average return. It illustrates that RMO, TERM and DEF are explanatory variables in the excess return, but it does not explain cross-sectional in average return and they also have a largely uncorrelated to SMB and HML. SMB and HML also have a good explanation on the common time-series variation in stock return and cross-section of average stock return and also good in isolating the firm-specific components of return. Nevertheless, the five-factor model shows how stocks return and bonds return is linked together by using the five explanatory variables with the slope of those variables to explain the studies. However, in this paper they also test other models for different purposes and we can see that in each variable they have many differences in terms of interpretation and how good they can be captured in that model. Moreover, there are many descriptions in each test result. It shows that when they add or drop some factor how it will affect the test results and how those variables will explain the results. For example, in table 11 which includes tax on dividends and see how it will affect the pattern of stock return by interpretation on HML slope. As a result, all of the test results are correlated and linked to each other. So that we can conclude the answer more precisely.

Even though this test shows common return factors related to the size and BE/ME which also help to capture the model. But, Fama and French(1992b) said that they still have some questions regarding the test results that they have done. For example, they did not show how the size and BE/ME factors in returns are driven by the stochastic behavior of earnings. It means that there are many interesting questions which we can construct and test like they did to see the answer of our assumptions. In my opinion, if we try to include more variables and more factors in this model, we will absolutely see many interesting results from this model.