EE433 Paper Summary

Paper : Common risk factors in the returns on stocks and bonds
Author : Eugene F. Fama and Kennth R. French

The cross-section data of average returns on common stocks in the US shows the relationship with the variables that have no standing in the asset pricing theory. The variables that can be used to determine the average returns of stocks are the size of the stocks (price of the stocks times number of shares), leverage, Earning divided by price, and book-to-market equity. Fama and French study the role of market Beta jointly with the variables in the average return. The finding suggested that the use of Beta alone or with the other variables does not have the explanatory power to explain the average returns. On the other hand, the size and book-to-market equity can be used to explain the average returns of the US common stock on NYSE, Amex and NASDAQ during the period of 1963-1990. So this research paper extended the asset-pricing test by Fama and French in 3 different ways. The first is the asset return that can be explained, in Fama and French they only considered the return of common stocks but if the markets are integrated the bond return can also be explained as well. Secondly, the variables size and book-to-market can be used to explain the stock return, so by extending the term-structure variables that are in bond return, we can determine that the variables in bond return can explain the stock return or not. Lastly, the most important of all, the approach to testing the asset-pricing model, it is difficult to add the size and book-to-market variables in the cross-sectional data for the government bond. So in this research paper, by using the approach of Balck, Jensen and Scholes in time-series regression. By regressing the monthly returns of stock and bond on the return of the market portfolio, the slope of this regression can be used to explained the sensitivity on the stock and bond.