Phromphon Klinsuwan
6204641838

Common risk factors in the returns on stocks and bonds

The paper identified five common risk factors, three of which were stock-market factors: overall market factor, factors related to firm size, and book-to-market equity. Other two factors were bond-market factors related to maturity and default risks. These five factors seemed to explain average returns on stocks and bonds.

The models this paper used were mostly asset-pricing models using the time-series regressions to study the issues. The inputs in time-series regressions explained the variables including the returns on market portfolio of stocks and mimicked portfolios for the size, book- to-market, and term-structure factors in returns. In bond-market factors, one common risk factor arose from unexpected changes in interest rates. The proxy in the paper was the difference between the monthly long-term government bonds return and the one-month treasury bill rate measured at the end of the previous month. The paper determined that the bill rate was meant to proxy for the general level of expected returns on bonds. So that TERM proxies for the deviation of long-term bond returns from expected returns due to shifts in interest rates. Furthermore, the shift in economic conditions can give default rise on long-term corporate bonds as well. In stock-market factors, size and book-to-market equity seemed like variables to explain average stock returns, the paper research team had reason to expect that they proxy for common risk factors in returns. Meaning that, in the stock-market, the small firms can suffer a long earnings depression due to size associated with a common risk factor which has a negative relation between size and average return. To easily envision this, I would like to clarify that in Bonds the factors are excess returns on both government bonds and corporate bonds, which there were a rating group to be considered for corporate bonds, according to Moody's rating groups Aaa, Aa, A, Baa, and Low Grade. These are the common factors in returns on bonds. Then in Stocks, specifically in this paper, they used excess return on 25 portfolios that were based on size and book-to-market equity (BE/ME). To calculate both returns, they used a cross-section of average returns by observing the varying returns across different stocks at one point in time.

After the process of calculating risk and return by using cross-section, they diagnosed that there were at least five common factors in returns. Three stock-market factors produced common variation in stock returns, except for low-grade corporate bonds. The stock-market factors had little role in returns on government and corporate bonds. And stock and bond markets are linked through two shared term-structure factors.

To sum up, they suggested that there was an economic story behind the size and book-to-market effects in average stock returns. The tests showed common return factors related to size and book-to-market equity that helped capture the cross-section of average stock returns in a way that was consistent with multi factor asset-pricing models.