Sources of Time-Varying Risk and Risk Premia in U.S. Stock

and Bond Markets

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Abstract

This paper investigates the sources of time-varying risk and risk premia for both the U.S. stock and bond markets. Although a growing literature has emerged that examines the return and volatility characteristics of the U.S. stock and bond markets separately, little work has appeared that models these markets jointly. This paper proposes a model that provides evidence concerning the sources of time varying risk and risk premia in the markets that considers both markets simultaneously. The model captures the change in the risk premium to each market's own volatility risk as well as to the covariance risk for specific events. We test for the effects of macroeconomic news on time-varying volatility as well as time-varying covariance, and whether such news induces time-varying risk premia in either of the markets. We find that stocks, as opposed to bonds exhibit a change in the risk premium on variance risk on PPI announcement dates. There is also evidence of a change in the bond risk premium on covariance risk on macroeconomic news announcement dates. Employment reports and PPI releases appear as events inducing time-varying conditional variance for stock, Treasury Notes, as well as Treasury Bond returns. Finally, the results do not support the conjecture that conditional covariance of stock and bond returns falls on announcement days.

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