

International Investment Model for Asset Allocation in Life Insurance and Pension Fund Management

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Abstract

We developed an investment model for an investor who makes international strategies when he can invest in bank account, bond and stocks in both domestic and foreign economy. We set a stochastic framework based on affine term structure of interest rates and Markov Regime Switching for stocks which try to provide the best correlation structure between markets. We use this model for life insurance and pension fund management to show how can manager allocates his asset to meet his engagement. The model is calibrated to Canadian(domestic market) and U.S (foreign market) data.

Keywords : Risk management; Investment model; Asset allocation; Stochastic models; Affine term structure of interest rate; Markov Regime Switching

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