

Dynamic relationship between Stock market and Bond market: A GAS MIDAS copula approach.

Hoang Nguyen^(a), Farrukh Javed^(a)

^(a) School of Business - Örebro University, Sweden

February 12, 2021

Abstract

There is evidence that macroeconomic variables influence the relation among financial variables, however they are sampled at different frequencies. This study proposes generalized autoregressive score mixed frequency data sampling (GAS MIDAS) copula models to analyze the dynamic relationship between Stock returns and Bond returns. A GAS MIDAS copula decomposes their relationship into a short term dependence and a long term dependence. While the long term effect is updated at a lower frequency using a MIDAS regression, the short term effect follows a GAS process. Asymmetric dependence at different quantiles are taken into account. The model helps to improve the in-sample goodness of fit and the out-of-sample forecast.

Keywords: GAS copulas, MIDAS, asymmetry