

# EQUITY YIELDS AND BETA TERM STRUCTURE. AN ANALYSIS IN TIME-FREQUENCY DOMAIN\*

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## Abstract

Recent financial literature has found empirical evidence for the existence of a term structure of equity yields. There are several empirical studies that show that the behavior of asset returns, with respect to the risk factors, change over time and therefore a dynamic beta. This work uses discrete wavelet transform to obtain a decomposition of the time series in orthogonal factors for different frequencies and time horizons. In this way, we apply this methodology to a sample of portfolios and different risk factors. The results show that for some portfolios and factors, there is a term structure of betas, since even the sign of the effect changes with the time horizon.

**Keywords:** term structure, time-scale beta, wavelets, factorial CAPM, time-frequency decomposition.

**JEL Classification:** C32; C38; G12.

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