Green Bonds and Market Efficiency: A Beauty Contest Approach

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Abstract

This note develops a tractable theory of green bond pricing and market efficiency in the spirit of Allen–Morris–Shin (2006). The model features two risky bond claims with correlated fundamentals in a constant absolute risk aversion (CARA)-normal noisy rational expectations equilibrium. We introduce a green-bond holder benefit, captured by a convenience yield wedge, and a central bank policy demand. Both wedges are observed through public and private noisy signals. The resulting pricing recursion embeds iterated average expectations and implies sluggish adjustment to persistent shocks. The model delivers time-varying return predictability and spread dynamics that can be mapped into the time-varying vector autoregression (TV-VAR) inefficiency measure obtained in the empirical analysis.

JEL classification: C32; E58; G12; G14
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